

MAR 14 '44 B

The SOUTHERN ECONOMIC JOURNAL

Volume X

JANUARY, 1944

Number 3

CONTENTS

Historico-Economic Aspects of Drainage in the Florida
Everglades *L. LeMar Stephan* 197

Bank Money in the United States during the First Half of
the Nineteenth Century *Fritz Redlich* 212

The High-Cost-of-Living Problem after World War I
E. Jay Howenstine, Jr. 222

Wages and Labor Costs *Richard A. Lester* 235

Voluntary Savings and Consumer Behavior
Charles T. Taylor 239

Book Reviews 246

By M. D. Anderson, D. J. Cowden, John Donaldson, John G. Eldridge, B. B.
Holder, D. Clark Hyde, Walter W. Jennings, H. E. Klontz, A. R. Newsome,
George T. Starnes, James E. Ward, T. W. Wood, John B. Woosley.

State Reports 263

By E. H. Anderson, Harwood B. Dolbear, Albert Griffin, Rodman Sullivan,
Robert W. French, Francis S. Scott, T. W. Wood, T. L. Howard, George M.
Modlin.

Personnel Notes 269

Communications and Reports 270

Books Received 273

A JOINT PUBLICATION OF THE SOUTHERN ECONOMIC ASSOCIATION
AND THE UNIVERSITY OF NORTH CAROLINA

Published Quarterly at Chapel Hill, N. C.

Copyright, 1944, by the Southern Economic Association



Volume X, Number 3

JANUARY, 1944

The SOUTHERN ECONOMIC JOURNAL

A JOINT PUBLICATION OF THE SOUTHERN ECONOMIC ASSOCIATION
AND THE UNIVERSITY OF NORTH CAROLINA

Published Quarterly at Chapel Hill, N. C.

BOARD OF EDITORS

R. P. BROOKS
University of Georgia
M. C. LEAGER
North Carolina State College,
University of North Carolina
E. L. RAUBER
Alabama Polytechnic Institute

A. S. KEISTER
The Woman's College,
University of North Carolina
B. U. RATCHFORD
Duke University
H. D. WOLF
University of North Carolina

MANAGING EDITOR

D. H. BUCHANAN
University of North Carolina

CORRESPONDENTS

Alabama—E. H. ANDERSON
Florida—HARWOOD B. DOLBEARE
Georgia—ALBERT GRIFFIN
Kentucky—RODMAN SULLIVAN
Louisiana—ROBERT W. FRENCH

Mississippi—FRANCIS S. SCOTT
North Carolina—T. W. WOOD
South Carolina—
Tennessee—T. L. HOWARD
Virginia—GEORGE M. MODLIN

The Southern Economic Journal is published four times a year, in January, April, July, and October, at Chapel Hill, N. C. The subscription price is \$3.00 per year, \$1.00 for single copies, and 75 cents each for back numbers prior to Vol. II, No. 3. A special rate of \$2.00 is granted to members of the Southern Economic Association.

All communications should be addressed to the Managing Editors, P. O. Box 389, Chapel Hill, N. C.

The articles in this *Journal* are indexed in *The International Index to Periodicals*, New York, N. Y.

Entered as second-class matter May 11, 1936, at the Post Office at Chapel Hill, North Carolina, under the act of March 3, 1879, section 520, P. L. & R.

Printed by the Waverly Press, Inc., Baltimore, U. S. A.

The SOUTHERN ECONOMIC JOURNAL

January, 1944

HISTORICO-ECONOMIC ASPECTS OF DRAINAGE IN THE
FLORIDA EVERGLADES

L. LEMAR STEPHAN

Birmingham-Southern College

Agricultural activity in the Everglades, so far as white man is concerned, did not begin until initial steps had been taken toward control of water. The first Everglades dwellers were Seminole Indians, who moved south from Georgia about 1750 and remained until most of them were deported by the United States Government in 1858.¹ The Indian practice of planting a few vegetables during the period of low water, then hunting and fishing during the rainy season, held no attraction for men accustomed to permanent habitation. As a result, lands were not offered for sale until reclamation projects were under way and success was reassuring. Land in the Upper Glades began, then, to have property value when labor and capital were applied.

Water standing on the ground for several months in the year seemed at first to be the sole impediment to agriculture. When Lake Okeechobee annually overflowed onto the lands of the Everglades, a sand and limestone embankment rimming south Florida prevented natural drainage. Thus the estimates of cost of reclamation, made about the middle of the nineteenth century, were based upon the hypothesis that agriculture could be practised as soon as the level of the lake was lowered by outlet canals from the lake through the limestone coastal rim to the ocean. In time, numerous other problems presented themselves: (1) lowering the ground water to a level desirable for crop cultivation, (2) raising the ground water during the dry period as an aid to plant growth, to prevent soil shrinkage and disastrous fires, (3) maintaining channels for water transportation, and (4) affording adequate hurricane protection, to say nothing of the economic problems involved in improving land in the amount actually needed for cultivation at a given time. As a consequence, the costs of water control—costs borne for two decades by the land owners, but since 1930 shared by state and Federal governments—finally exceeded many times the original estimates.

I

Soon after Florida attained statehood (1845), its citizens fostered plans for reclamation of the Everglades, which at that time still belonged to the Federal government. In 1847, Senator Westcott of Florida secured the appointment

¹ L. LeMar Stephan, "Geographic Role of the Everglades in the Early History of Florida," *The Scientific Monthly*, Vol. LV (December 1942), pp. 517-521.

of an agent for the Treasury Department, Mr. Buckingham Smith, to investigate whether reclamation of the Everglades marsh would be practicable. After investigation, Smith reported in the affirmative. He estimated the cost at \$500,000.

Three years later the United States enacted legislation which granted the Everglades to Florida.

"The act of 1850 granted to each of the several States of the Union those swamps and overflowed lands within their respective boundaries which remained unsold by the Federal Government at the time of the passage of the act; the stated purpose being to enable the respective States 'to construct the necessary levees and drains to reclaim the swamp and overflowed lands therein.' The act carried the further provision 'that the proceeds of said lands, whether from sale or by direct appropriation in kind, shall be applied, exclusively, as far as necessary, to the purpose of reclaiming said lands by means of the levees and drains aforesaid.'"²

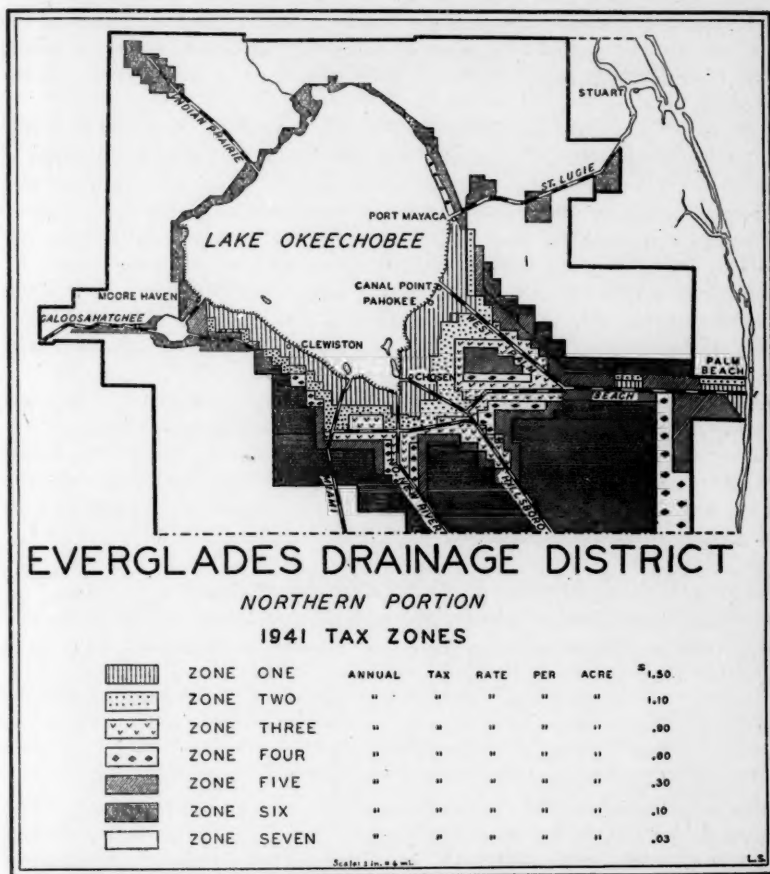
The grant was accepted in 1851 and in 1855 the legislature set up a board of trustees for the Internal Improvement Fund, which included the governor and four other state officials and their successors in office. Eventually Florida received over 20,000,000 acres of land under the Land Act of 1850.

The first attempt to drain the Everglades was made by the Disston Company (the Atlantic & Gulf Coast Canal and Okeechobee Land Company) from 1881 to 1889. The value of the venture to the state of Florida was not that reclaimed lands were opened up for settlement, but that the \$1,000,000 paid by Hamilton Disston into a state treasury bankrupt from a carpetbagger government put Florida years ahead of other southern states in restoring fiscal stability. Disston sought to make Kissimmee (the terminus of existing rail lines) the capital of a new sugar empire and to provide it with water connections from the Gulf. In the latter plan he succeeded, by dredging the Kissimmee and Caloosahatchee Rivers and connecting Lakes Hicpochee and Okeechobee by a canal; in the former scheme he failed, for little of his 4,000,000 acres were put under cultivation. The waterway to Kissimmee was little used, actually, because of the completion of a railroad from Kissimmee to Tampa by the Plant lines in January, 1884. In conformity with the Land Grant of 1850, Disston was expected to lower permanently the level of Lake Okeechobee to such a degree that the Everglades would be free of surface water at all seasons. Operations of the Disston Company ceased about 1889, without fulfilling this obligation. "... The only canals excavated by the Disston Company that would have tended to reduce the waters of Lake Okeechobee and the Everglades, had they been completed, were a canal from the southwest shore of Lake Okeechobee into the Caloosahatchee River and one extending south from Lake Okeechobee into the Glades without outlet."³

² U. S. Congress, Senate, A Report to the United States District Engineer, Jacksonville, Florida, submitted to Okeechobee Flood Control District of Florida, *Caloosahatchee River and Lake Okeechobee Drainage Areas, Florida*, Sen. Doc. 225, 71st Cong., 3rd Sess. (Washington: Government Printing Office, 1930), p. 11.

³ U. S. Congress, Senate, *Everglades of Florida*, Acts, Reports, and other papers State and National, relating to the Everglades of the State of Florida and their reclamation, Sen. Doc. 89, 62nd Cong., 1st Sess. (Washington: Government Printing Office, 1911), p. 10.

Nor was Hamilton Disston the only entrepreneur who envisioned wealth-producing possibilities in a drained Everglades. Two railroad magnates, Henry B. Plant and Henry M. Flagler, each desired that a populous and rich agricultural land develop near the terminus of his railroad system (Atlantic Coast Line and Florida East Coast Railway, respectively). In 1892, Plant sent an expedition under the leadership of J. E. Ingraham, one of the company's vice-



presidents, to investigate the feasibility of draining the Everglades. Ingraham's report was favorable, but no action was taken by his company. The Florida East Coast Railway Company, however, actually began drainage operations in 1896. "The operations of this company . . . were directed toward opening and enlarging the natural streams for the purpose of lowering the water of the arms of the Glades during the winter season, to facilitate the growing of winter vege-

tables."⁴ This enterprise made arable small tracts along the Atlantic coast without substantially affecting the Everglades as a whole.

Popular interest in the agricultural possibilities of the great marshland was stimulated by the findings of Dr. H. W. Wiley who reported in 1891 on *The Muck Lands of the Florida Peninsula* and in 1905 on *Cane and Cassava Culture in Florida*. According to Dr. Wiley's estimates, it would have been possible to deliver sugar cane to the factory at a cost of less than \$2.00 per ton, if canals were used for transportation and for floating steam engines for powering the operations of cultivation. He predicted that the region could be free from frosts. His enthusiasm ran high, too, for the future of rice and tropical fruits in the Glades.

Increased interest in the Everglades brought to the fore the question of title to the lands. In 1901 the trustees of the Internal Improvement Fund agreed to set aside the land grants made by the legislature, for the purpose of encouraging railroad building, on the ground that the trustees alone had authority to dispose of lands under the Act of 1850. Had this decision of the Trustees not been upheld by the court action which ensued, the loss of the 8,000,000 acres claimed by the railroads would have left the Internal Improvement Fund without either lands or money. The test case, brought by the Southern States Land & Timber Company, was finally decided in May, 1907, and since then no decision has been adverse to the trustees.

To Governor W. S. Jennings (1901-05) belongs much of the credit which has accrued to his successor, Governor Broward, for starting actual drainage. It was Jennings who called attention to the fact that no patent had ever been issued which transferred the swamp lands from the United States to Florida under the Act of 1850. Patent to an estimated 2,862,080 acres⁵ was then issued on April 29, 1903. Jennings, furthermore,

"caused data to be compiled concerning the possibility and practicability of draining the Everglades, the rainfall, altitude, outlets, and topography, with drawings showing the altitude of Lake Okeechobee, profiles of the Kissimmee River and lakes and their elevation above tidewater. These showed the normal elevation of Lake Okeechobee to be 20.42 feet above the level of the Gulf of Mexico and practically the same elevation above the Atlantic Ocean. All these data, together with profile drawings and information as to the nature of the soil and its fertility and products, he laid before the legislature of 1903. In the same message he named the drainage outlets to be deepened by cutting canals from Lake Okeechobee to the Gulf and to the Atlantic Ocean."⁶

The conclusion based upon this report was that the land, prior to farming, could be drained at a relatively small cost per acre and the value of the land would immediately rise. Costs would not exceed the benefits. Under the administra-

⁴ *Ibid.*, p. 95.

⁵ F. C. Elliot, *Everglades Drainage District, Biennial Report 1925-1926* (Tallahassee: Everglades Drainage District, 1927), p. 61.

⁶ Caroline Mays Brevard, *A History of Florida From the Treaty of 1763 to Our Own Times*, ed. James Alexander Robertson, 2 vols. (Deland, Florida: The Florida Historical Society, 1924), Vol. II, p. 194.

tion of Governor Jennings, therefore, were taken the initial steps toward actual drainage which had its inception under Governor Broward.

Napoleon Bonaparte Broward, governor 1905-1909, boldly sought election on a platform of draining the Everglades, at a time when the title of lands granted railroad companies by the legislature was being bitterly contested in the courts. Promptly after Broward's inauguration in January, 1905, "the legislature of the State created Everglades Drainage District, including the Everglades lands, which by that time were owned in part by the trustees and in part by various private interests."⁷

The law was ruled unconstitutional by the Federal court. An amended act was passed by the legislature of 1907 which was sustained by the courts: "The District is administered by the 'Board of Commissioners, Everglades Drainage District, with membership identical with that of the 'Trustees of the Internal Improvement Fund' . . ."⁸ "The total number of acres included in the drainage project, which includes lands contiguous to the Everglades proper, exceeds four million."⁹ The Drainage District had two sources of funds for the reclamation work: proceeds from the sale of lands, and revenue from a tax of five cents an acre per annum on all land—regardless of ownership—lying within the District.

During the four-year period, July 1906 to July 1910, the object was to drain the Glades by permanently lowering the level of Lake Okeechobee with a series of canals extending diagonally from the lake southeastward to the Atlantic. The method of accomplishment was direct operation of dredges.

During the period 1906-1910, four dredges were placed in use: the dredge *Everglades* (launched July 4, 1906), *Dredge Okeechobee* (October, 1906), the *Caloosahatchee* (1908), and the *Miami* (1909).¹⁰ The Caloosahatchee Canal (old Disston Cut) was dredged for the fifteen miles of its length and beginnings made on three new canals. By July 1, 1910 there had been completed 11.19 miles on the North New River Canal, 13.64 miles on the South New River Canal, and 4.25 miles on the Miami Canal. These reclamation activities caused an increase in the price of Everglades land from \$1.25 an acre in 1908 to \$15.00 in 1910.¹¹

Drainage of the lands was continued under Governor Albert W. Gilchrist. Beginning July 1, 1910, the method of construction of canals was changed to that of awarding contracts to private construction companies. The four district-owned dredges were sold at this time. Under the new arrangement work progressed much faster, forty miles of excavation being completed in the first ten months after the letting of the contract.

⁷ Senate Doc. 225, *op. cit.*, p. 13.

⁸ *Report of Everglades Engineering Board of Review*, to Board of Commissioners of Everglades Drainage District (Tallahassee: Everglades Engineering Board of Review, 1927), p. 27.

⁹ Nevin O. Winter, *Florida, The Land of Enchantment* (Boston: The Page Company, 1918), p. 308.

¹⁰ F. C. Elliot, *Everglades Drainage District, Biennial Report 1927-1928*, to the Board of Commissioners of Everglades Drainage District (Tallahassee: Everglades Drainage District, 1929), p. 64.

¹¹ *Ibid.*, p. 65.

Prior to January 1, 1909, costs of drainage were paid from the Internal Improvement Fund and from that time until January 1, 1917, costs were divided between the Internal Improvement Fund and the Everglades Drainage District. "All payments from the Internal Improvement Fund for Everglades drainage works were reimbursed later by Everglades Drainage District."¹²

II

Since 1913, drainage has been carried out under the terms of the Act of that year, with such amendments as have been added from time to time. Two changes were made in manner of finance: the uniform tax of five cents an acre was abandoned in favor of a differential system of taxation varying with the amount of benefit accruing from successful drainage projects. Taxes within the Drainage District continue to the present to be levied on a zone basis (five in number) supplemented by a one mill levy on each dollar's worth of property in the District.¹³ The Drainage District was further authorized to issue bonds secured by these taxes.

The Florida Everglades Engineering Commission, under the chairmanship of Isham Randolph, undertook to formulate plans for complete drainage of the Everglades. The so-called Isham Randolph plan has been followed, with minor exceptions, since that time and in 1927, its essential features were upheld by the Everglades Engineering Board of Review. The Randolph commission stated:

"The solution of the Everglades drainage problem is primarily dependent upon the disposition to be made of the flood waters entering Lake Okeechobee from the north. These flood waters under present conditions pass over the south rim of the lake and spread over the Everglades, placing that great area under servitude of the surplus waters of the northern watershed. In our judgment the Everglades can best be relieved of this servitude by diverting the flood waters through a canal of adequate capacity occupying the shortest practicable route to the Atlantic Ocean or an inlet thereof With these extraneous flood waters diverted as indicated, the problem of draining the Everglades is reduced to proper provision for carrying off the precipitation upon them. This can be accomplished by adding to the main canals which now traverse this territory—canals now surcharged with waters flowing out of Lake Okeechobee—other canals"¹⁴

The Commission estimated that the Okeechobee-St. Lucie control canal would, in addition to serving the purposes of drainage, provide a twelve-foot navigable canal and a source of waterpower. (The latter expectation was not realized.)

During the decade 1916-1926, the greater proportion of Everglades drainage as it exists today was completed. Since the chief feature of the policy of drainage by gravity is the prevention of lake overflows, the achievement was substantially

¹² *Report of Board of Review*, p. 28.

¹³ Nathan Mayo, *Possibilities of the Everglades* (Tallahassee: State of Florida, Department of Agriculture, 1932), Bulletin 61, p. 6.

¹⁴ U. S. Congress, Senate, Report of Florida Everglades Engineering Commission to Board of Commissioners of Everglades Drainage District and Trustees of Internal Improvement Fund, *Florida Everglades*, Sen. Doc. 379, 63rd Cong., 3rd Sess. (Washington: Government Printing Office, 1914), p. 5.

unsatisfactory until a control canal could be put into operation. The St. Lucie River was chosen as a direct route to the ocean. Construction on the St. Lucie Canal began actively in January, 1916. Too late to be of any assistance in preventing disaster, "the St. Lucie Canal came into 70% operation early in October, 1926, shortly after the great September hurricane, and began for the first time to be effective in controlling the levels of Lake Okeechobee."¹⁵

During this period, 1916-1926, work on the drainage canals as well was pushed. Construction of control locks and dams was practically complete for canals in operation by 1925. Even before the St. Lucie Canal provided effective control of the levels of Lake Okeechobee, agriculture was undertaken along drainage canals with considerable success. By May 31, 1926, 486.9 miles of main canals were open. These canals were the St. Lucie, Hillsboro, West Palm Beach, North New River, South New River, Caloosahatchee, Indian Prairie, and the half-finished Miami.

In the biennial report dated January 1, 1927, the Chief Drainage Engineer recommended a few revisions in the Isham Randolph plan. An Everglades Engineering Board of Review, reporting May, 1927, upheld the proposed revisions. An east and west system of main canals was advocated instead of additional diagonal drainage canals trending southeastward, first, because a shorter route to the sea would more effectively utilize the limited fall and thus flow less sluggishly, and, second, because less hard rock would be encountered in the east-west route. This revision is the plan in operation today. Six to eight miles was judged the most economical spacing for arterial canals.

The control levels of Lake Okeechobee had been maintained at a maximum of 19 feet and a minimum of 16 feet, according to the recommendation of the Randolph Commission. A change of levels of 17 feet and 14 feet was proposed, and ultimately adopted, since soil subsidence had amounted to four feet and over, instead of the estimated eight inches.

The report of the Everglades Engineering Board of Review in 1927 closed permanently any consideration of a power project on the St. Lucie Canal because records showed such a project would be unprofitable for lack of sufficient water.

The report of the Board of Review inaugurated an era of progressive drainage of the Everglades, such as that recommended by the Randolph Commission, succeeding the period in which total drainage was attempted. Economic necessity dictated that water-control improvements result in rendering specific tracts capable of paying reclamation costs by their taxes.

III

The natural lake rim along the southern shore of Okeechobee was lowered to a dangerous degree by soil subsidence. In 1921, therefore, levee construction was begun with the purpose of restoring original or somewhat higher levels. Since this levee was designed merely to confine lake waters during the period of high water, it was constructed for the most part of muck, marl, and sand, or a

¹⁵ *Report of Board of Reviews*, p. 36.

mixture of the above and of rock in a few places where rock had been encountered in excavating. To January 1, 1927, \$455,187 had been expended on this levee.¹⁶

Extensive breaching in the Moore Haven district in September, 1926, revealed urgent need for larger and stronger levees. When the hurricane of October, 1928 struck the southeast shore, temporary levees were, for the most part 22 feet to 28 feet in elevation. A few high sections around 29 feet in elevation showed evidence that the water did not go over these high places.

"Though without riprap protection, considerable reaches of the levee suffered but minor damage. In a few places the levee was breached; in many places the top was washed away to a depth of two to three feet. The section of levee where damage occurred extended from Pelican Point to Miami Canal, a distance of 21.6 miles. The aggregate of length of levee damaged to the extent of having its crest lowered to an elevation of 20 feet or below, was 1.7 miles."¹⁷

Failure of the levees to protect life and property resulted, then, from a failure to anticipate wave crests of 29 feet, rather than from faulty construction.

General loss of confidence in Florida bonds following the collapse of the Florida "boom", coupled with extensive property damage inflicted by two hurricanes, made it impossible for the Okeechobee Flood-control District (created by legislative act in 1929) to finance adequate hurricane protection. The State of Florida, in the interests of general welfare of the state, and the Federal government, for the protection of human life and for the maintenance of navigation, joined with local interests in constructing a large 66-mile dike around the southern half of the lake. A less substantial dike was provided for northern shores financed by local interests.

The south-shore levee, under construction from 1930 to 1937, was built to a height of thirty-four feet. Over a marl and sand core, there is a rock facing three and a half feet thick on the lakeward side, three feet on top, and two and a half on the landward flank. Excavation of rock for riprap work facilitated the construction of a belt-line canal 80 feet wide and six feet deep following the south shore of the lake.

A program of tree-planting has recently made for protection of the earthen levee of the north shore. In the spring of 1938 work was begun with the planting of 17,000 willow sprigs.¹⁸ The following year Australian pines, Australian oaks, bamboo and cajuput trees were set out.

Elaborate precautions are taken each hurricane season. Each man who is expected to patrol the levees or serve at one of the hurricane gates knows his post of duty. Communication between hurricane gates by wireless telephone was installed in 1939.

Minimum and maximum lake levels to be maintained were determined by the act of Congress which made Okeechobee part of the territorial waters of the United States. The legal levels are 14 and 17 feet, respectively. In hearings

¹⁶ *Ibid.*, p. 37.

¹⁷ *Drainage District Report 1927-1928*, pp. 27 and 29.

¹⁸ *Glades County Democrat*, Moore Haven, Florida, March 24, 1939.

before the District Engineer in 1939, a majority of drainage officials favored at least a two-foot raise in levels. Higher levels are of value in fire prevention, irrigation, waterway transportation, wild-life conservation, and frost control. Such change is opposed by the owners of island land, by the three lowest-lying sub-drainage districts (on the ground that existing facilities would have to be enlarged to accommodate a larger flow of water), and by east-coast tourist areas (objecting to any large flow of waters through the canals, such as would tend to disturb coastal fishing). B. S. Clayton, Associate Drainage Engineer of the Bureau of Agricultural Engineering, believes that the most satisfactory lake level is 16 feet. Any adjustment of lake levels should be part of a general comprehensive water-control plan.

IV

All early drainage operations were predicated upon the assumption that canals would serve as a major artery of transportation, thus increasing accessibility and its manifold economic and social implications. Canals did serve such a purpose until well into the 20's and the barrier of marsh waters was further reduced. Today, however, highways and railroads move all freight except that carried by way of the cross-state canal and its belt-line canal connections.

Following the flood of 1928, fear of hurricane tides led to demand for a very low lake level—a level which would have jeopardized water travel through the lake. Federal participation in the flood-control and water-transportation project of 1930 did, however, provide adequate flood protection while maintaining a cross-state channel 6 feet deep and 80 feet wide.¹⁹ Congress provided these facilities for Okeechobee navigation over the recommendation of government engineers, who judged that neither actual nor potential water-borne commerce in the region justified such expenditure. In 1935 there were 55,382 tons shipped in vessel traffic with a value of \$3,345,036, and 7,530 tons in general ferry service, to a value of \$1,882,500, or a total of 62,912 tons in all traffic with a total value of \$5,227,536.²⁰ These figures include contractor's supplies used for levee and canal construction. Chief items brought into the Glades by water are gasoline and fuel oil. Of the products sent out of the Glades by water, vegetable food products and fruit lead, followed by lumber (from the north shores of Okeechobee) and fish.

Canals leading from Lake Okeechobee, other than the St. Lucie and Caloosahatchee, enjoyed little traffic in 1935. The Miami Canal was reported as having a controlling depth of eight feet for two miles above Miami River and one foot

¹⁹ U. S. Congress, Senate, Letter from the Chief of Engineers United States Army to the Chairman of the Committee on Commerce United States Senate, submitting a Review of the Reports on Caloosahatchee River and Lake Okeechobee Drainage Areas, Fla., submitted in House Document No. 215, Seventieth Congress, and in Senate Document No. 213, Seventieth Congress, *Caloosahatchee River and Lake Okeechobee Drainage Areas, Fla.*, Sen. Doc. 115, 71st Cong., 2nd Sess. (Washington: Government Printing Office, 1930), p. 38.

²⁰ *Report Upon the Improvement of Rivers and Harbors in the Jacksonville, Fla., District, Annual Report of the Chief of Engineers, 1936* (Washington: Government Printing Office, 1937), p. 545.

throughout the rest of its course to Lake Okeechobee, hence the figures 1,500 tons to a value of \$3,750 and passengers numbering 4,220 represent chiefly cruise and excursion boats in the Miami vicinity and not Upper Glades' traffic. The South New River Canal, serving Lower Glades' settlements such as Dania, had no passengers for 1935 and but 64,044 tons valued at \$384,264. Revealing as to canal transportation in the Upper Glades, is the report for North New River, West Palm Beach and Hillsboro Canals which had neither passenger nor freight traffic. Footnote comments on the commerce of these canals are respectively: "It is reported that the cessation of traffic on this canal has been due to the deterioration of the waterway and to the completion of improved roads over which cheap and rapid motor transportation is available." . . . "The waterway is blocked by water hyacinths except for a distance of about 1 mile at the lower end, which is reported to have been used by occasional small pleasure boats." . . . "There is no regular traffic on the waterway. It is reported that a few small pleasure boats go up the canal for a distance of about 2 miles above the mouth for sight-seeing and fishing purposes, but no data are available on the trips and drafts of these boats or the number of passengers carried. The remainder of the waterway is blocked by hyacinths and snags and is not navigable".²¹

In 1936 army engineers put in operation a machine which seeks to clear canals of hyacinths by conveying them to the banks. If early optimistic approval of this machine was justified, canal transportation may not be a thing of the past. The \$10,000 for clearing the canals was appropriated as much for lessening flood danger during the hurricane season as for facilitating transportation by water.

Recent interest in water transportation for the Upper Glades is revealed in two news articles: A new lock in the St. Lucie is under construction replacing the Port Mayaca lock and providing a lake-level canal from Okeechobee to the outskirts of Stuart. At low lake levels there will be between ten and eleven feet of water over the lock sill.²² A news bulletin reports United States engineers as favoring increasing the controlling depth of the cross-state waterway from six to eight feet. The Chamber of Commerce at Belle Glade is seeking to secure navigable waterway connections for Belle Glade either via the Hillsboro Canal and Lake Okeechobee or, preferably, via the Hillsboro Canal to Six-Mile Bend, thence via West Palm Beach Canal to the Atlantic. Residents of Upper Glades are thus seeking to cut shipping costs of such commodities as petroleum products, machinery, fertilizer and building materials by utilizing water routes.

V

Gravity drainage has long been frankly acknowledged to be inadequate. The Everglades Drainage District is, therefore, now supplemented by numerous sub-drainage districts which finance and operate pumping stations and provide a network of lateral canals to further water control within the district. Each sub-drainage district rims its boundaries with dikes and then seeks to control

²¹ *Ibid.*, pp. 564-565.

²² *Belle Glade News*, Belle Glade, Florida, October 20, 1939.

water levels within the district in keeping with the best interests of its growers. The fact that water control policies can differ from sub-district to sub-district has favored crop production and soil conservation.

To effect drainage in this flat land, main canals spaced at six-mile intervals and laterals carrying water to the main canals must be supplemented by farm ditches. Research by the Drainage Division of the Bureau of Agricultural Engineering has determined that "it is not advisable to place farm ditches more than an eighth of a mile apart and the area between ditches should be mole-drained."²³ In most cases, farm ditches are equipped with low-lifting pumping units.

"Small areas of a few hundred to a thousand acres usually are drained with turbine-type pumps driven either with electric motors or high-speed engines burning gasoline and fuel oil. The larger units of 3,000 to 10,000 acres are drained with wood-screw pumps driven by heavy-duty Diesel engines.

The larger pumping plants have a capacity of about 1" in 24 hours, which seems sufficient where cane is the principal crop. Areas growing truck crops need pumping plants with capacity of 2 to 3"—several independent units."²⁴

B. S. Clayton estimates that a system of laterals supplemented by farm ditches can take care of four inches or so of rainfall descending at one time, provided the ditches have been kept reasonably low previous to the rainfall period.

Mole-type underdrains are used both for drainage and for irrigation. (Overhead irrigation is conspicuously absent. This method seems to induce more plant diseases than sub-irrigation.) Mole lines are dug by drawing a 6-inch steel cylinder through the ground at a depth of about 30 inches. Dr. Neller states that the usual distance between these mole tunnels is from twelve to fifteen feet. An advantage of mole drains is the economy of installation, an average of \$1.00 per acre (as compared to \$1500.00 for tile under-drains).²⁵ To be sure, mole lines eventually fill with sludge, but some are still open after five years of use, according to B. S. Clayton.

The process of incorporating land under water control and breaking up the virgin organic peat soils is fairly costly. Dr. Neller estimates that the cost of ditching and installing suitable pumps ranges from \$20.00 to \$35.00 an acre. He further estimates that an 80-acre plot is about the minimum economical unit, and that the optimum size is a section, since drainage designs are adaptable to such a large unit and the owner usually has to contend with adverse seepage conditions around his area.²⁶

²³ B. S. Clayton, "Water Control in the Peat Soils of Florida", Bureau of Agricultural Engineering, No. 1077 (United States Department of Agriculture and University of Florida Agricultural Experiment Station, February, 1938), p. 11. (Mimeographed)

²⁴ B. S. Clayton, "Peat Soil Problems in the Everglades", *Florida Grower* (September, 1935) p. 10.

²⁵ Robert Creech, in interview.

²⁶ *Hearings Before the Select Committee Investigating National Defense Migration*, House of Representatives, Seventy-seventh Congress (Second Session), H. Res. 113, Part 33, Washington Hearings, 1942, p. 12543.

VI

Prior to construction of the great flood-control levee, undertaken in 1930, all expenses of water control were borne by owners of Everglades land acting together in the Everglades Drainage District and the various sub-drainage districts (in addition to further expenditures by individuals upon their own tracts of land). Drainage and sub-drainage districts alike were supported by taxes levied within their respective boundaries. Although these agencies were given legal entity by legislative enactment of the State of Florida, they did not constitute a financial drain upon the rest of the state except for the drainage taxes

TABLE I
DRAINAGE EXPENDITURES, 1905-1928*

YEAR	1	2	3	4	5	6	7	8
1905	\$1.25					45	\$5,391,000	
1910	2.00	1,492			42	45	8,626,000	
	(1913)							
1915	15.45	6,816	9,690,800	20,000	50	49	66,600,000	
			(1921)					
1920	24.73	23,500	9,424,100	34,000	72	81	106,300,000	5,000,000
1925	108.66	40,200	27,635,790	50,000	340	180	467,000,000	10,000,000
	(1926)						(1926)	
1927	81.51	46,007	41,824,090	92,000	507	192	350,500,000	10,255,000
1928	92.68	48,000	31,955,200	96,000	586	210	106,000,000	10,141,000

* These figures are taken from the Biennial Report of the Everglades Drainage District for 1927-1928, page 76.

Column 1—Average state land sales, price per acre

Column 2—Estimated population

Column 3—Assessed value as for state and county purposes

Column 4—Estimated acres under cultivation

Column 5—Miles improved roads

Column 6—Miles railroad

Column 7—Approximate value on state land sales basis

Column 8—Bonded debt

paid by the state upon unsold land. Inasmuch as improved lands were quickly sold and unimproved portions were taxed at a low rate, the contributions of Florida were negligible.

The effect of drainage expenditures upon land values and general economic progress is summarized in Table I. The report goes on to comment: "The cost of the drainage work to December 31st, 1928, was in round figures, \$18,000,000, or, for each million dollars expended in drainage by the district, the value of the district has increased about sixteen and one-half times—an expense ratio of 1 and increase value rate of 16½."²⁷ The fact that during the period down to 1930 the interest rate on Drainage District bonds was reduced from 6 per cent to 5½ per cent, and finally to 5 per cent, attests to general confidence in the enterprise.²⁸

²⁷ *Drainage District Report 1927-1928*, p. 77.

²⁸ Mayo, *op. cit.*, p. 6.

For the first time, in 1930, local funds were supplemented by Federal appropriations. The entire project of constructing and maintaining the lake levee and providing increased navigation facilities cost the United States \$18,000,000 by April, 1939. Local participation was limited to \$500,000 under the terms of an act in 1935. This great expense was not incurred because of any decision that the value of the reclaimed lands would justify it, but because it was evident that since people would continue to live in the Glades, they would need to have their safety secured. Thus, as reclamation operations progressed and settlement expanded, land values rose.

The decade of the 1930's revealed that the same fallacies of reasoning had fostered issues of Everglades bonds that had inflated the general bond market of the United States; and Drainage District bonds suffered the same decline as other bond issues. Confidence in a steady demand for new agricultural lands had prompted too rapid expansion of debt. Eventually the facts that new land was not, at the present, in demand and that products of the land already in cultivation could not always be marketed at a profit, checked further reclamation projects for the time being. That move brought taxpayers face to face with the realization that they—and they unaided by additional settlers—must pay off the bonded indebtedness.

In 1924 the Everglades Drainage District collected 94 per cent of the total tax levied on lands within its boundaries; by 1930 this had dropped to 27.2 per cent; by 1937, to 8.3 per cent. This meant that the Everglades Drainage District had to be refinanced. On January 1, 1931, the Drainage District defaulted on its bonds. Unsuccessful attempts to enact stage legislation for re-zoning in 1929 and 1931 had not helped the situation; there was still a disparity between benefits and charges in contrast to that of 1925 when a general bond refunding had occurred and the District zoned into six divisions. The composition of the Board of Commissioners was changed in 1931, by act of the legislature, to five members appointed by the Governor. In 1937 the Murphy Act was passed, which provided that the owner or a stranger to the title could apply to the county circuit court clerk for advertisement of land to be sold at auction to the highest bidder. The advertiser would bid the cost of advertising and fees of various county officers. The cost was gauged by the number of certificates involved, regardless of the area. This process, loaded with many inequities, cleared the tax books of accumulated taxes and put the lands back into a current position on the tax roll. This held valid for only two years, the state automatically retaining title to land not advertised and cleared. Landowners thus relieved themselves of state and county taxes, but continued to neglect their Everglades drainage taxes.

In 1941, by act of the legislature, the district was re-zoned as shown in Table II.²⁹ The act provided that a landowner could settle his back drainage taxes on the basis of 2-years' taxes under the new zoning and new rates, no matter how far back his default ran. Substantial settlements were soon made under this plan.

²⁹ *Hearings Before the Select Committee Investigating National Migration*, p. 12880.

A change in land policy has resulted since the Murphy Act and the 1941 tax compromise plan cleared Everglades land of long-standing tax liens and made it possible to secure uncontested titles: many growers who previously rented their lands have purchased them.

Indebtedness of the Everglades Drainage District in June, 1941, totaled \$17,040,212. The Reconstruction Finance Corporation agreed to authorize a loan to the District, a third remedial measure to balance tax books. This also has afforded the District a means of renovating and extending its drainage system, while at the same time encouraging individual land owners to proceed with making permanent improvements on their properties. Impetus has been given to this movement by a war-created increase in demand for Florida vegetables.

TABLE II
ACREAGE AND TAX RATES SHOWN IN THE NEW 1941 RE-ZONING OF THE EVERGLADES
DRAINAGE DISTRICT

ZONE	ACRES	TAX RATE
1.....	91,981	\$1.50
2.....	82,763	1.10
3.....	72,773	.90
4.....	125,483	.80
5.....	231,251	.30
6.....	928,677	.10
7.....	1,769,735	.03
8.....	383,897	.01½
School.....	94,303	
Exempt.....	89,534	

VII

Conclusions of the Drainage Basin Committee reporting in 1937 on drainage in the Everglades³⁰ are significant:

"These [peat and muck] are very fragile soils, highly susceptible to complete destruction through oxidation, shrinkage, and burning when neglectfully exposed to overdrained conditions.

Early efforts at drainage of this vast continuous tract as a unit have exposed it to the menace of untold damage in the undeveloped sections during the dry season of nearly 6 months which this section experiences. This condition has been accentuated by drainage through the great outlet canals that have been dug eastward (St. Lucie) to the Atlantic Ocean, and westward (Caloosahatchee) to the Gulf of Mexico."

The necessity for fire protection is today generally recognized in the Glades. Yet, in 1935 more than four hundred fires destroyed valuable muck and peat soil, one of these affecting 30,000,000 acres. A program to prevent both fires and soil subsidence is now in progress under the guidance of the United States Soil

³⁰ *Drainage Basin Committee Report for the Peninsular Florida Basins* (Washington: Government Printing Office, 1937), p. 13.

Conservation Service, acting in co-operation with the Everglades Fire Control Board. The plan is

"... to install retaining dams and spillways about every six miles along the canals. Better distribution and retention of excess water from the canals and rain water which falls on the undeveloped lands is the objective.

It is proposed to raise the water level in the canals, traversing undeveloped areas to or above the ground surface elevation. Thus runoff and seepage from adjacent lands into the canals would be retarded and the water-soaked muck would not become subject to ravage by fires. It would also have the effect of halting subsidence, natural oxidation and wind erosion, all of which play a part in destroying their fertility."²¹

Of unique interest is the proposal by Dr. John C. Gifford, Professor of Tropical Forestry at the University of Miami, that the uncultivated Everglades lands be reclaimed by a process of forestation.²² Such procedure would be merely an acceleration of Nature's reclamation by trees, begun in the custard apple and willow and elder belts near the lake and in isolated hammocks over the Glades. Water-tolerant trees planted in the driest places would lower the water table sufficiently to permit an ever increasing number and variety of trees. Among the species suggested by Dr. Gifford are: custard apple, elderberry, cocoplum, cypress, pencil cedar, native rubber, Australian pine, cajeput and mahogany. Nothing has been done toward the realization of the project.

The future of water control in cultivated areas seems obvious. The basis is a pumping system used both for removing water in one season and supplying it in the other. Two principles are pertinent: one, that the water table should be raised and maintained to lessen soil shrinkage caused by compaction and oxidation; the other, that reclamation should be regarded as a project to be accomplished in accordance with increased acreage as needed. The latter concept is not yet a reality, but is rapidly becoming recognized; the former is now well on its way to achievement. Such precautions will guard against repetition of the previous inflation disaster and place water control in the Everglades on a sound economic basis.

²¹ *Belle Glade News*, January 26, 1940.

²² John C. Gifford, "Everglades Drainage by Trees Suggested", *The Pahokee News*, Pahokee, Florida, November 9, 1934.

BANK MONEY IN THE UNITED STATES DURING THE FIRST HALF OF THE NINETEENTH CENTURY

FRITZ REDLICH

Analyst, Federal Public Housing Authority, Cambridge, Mass.

Bank currency in America down to Civil War times is generally known to have been rather unsound on the whole. Less widely known is the fact that this was due in part to the lack of standardization in the credit instruments put into circulation by the banks during those decades. In addition to instruments which corresponded to the bank notes of today, several other types of bank money were then in use, and these latter types form the subject of this paper.

I

The so-called post note, which will be discussed first, ranks second in importance to the genuine bank note. Webster and Murray define the post note in almost identical terms as "a note made and issued by a bank, payable not to bearer, but to order, not on demand, but at a future specified date."¹ These post notes have a history of their own, having been used and abused for different purposes during the first seventy-five years of American independence. In the historical process to be examined forthwith they took the following distinctly different forms: an older type, issued in uneven amounts for special purposes; and a later, standardized type issued in even amounts. The second type can be further divided into small notes of which some bore interest and some did not, and into large notes, all of which were interest-bearing.

The idea of making bank notes payable at a specified later date originated earlier in Mercantilism. The Bank of England contemplated such a policy at an early moment in its history,² and in most of the seventeenth and eighteenth-century schemes of banking on land and merchandise (as this type of Mercantilist banking was called) the notes to be issued were not supposed to be paid on demand, but at some specified future time. A good American example of this is a New Hampshire land-bank scheme of the 1730's. However, the device was not confined to the early American land-bank schemes; the payment of the notes of the so-called Silver Bank, a Massachusetts project for a money bank of 1740, was also deferred, the founders promising to pay certain amounts of gold or silver, expressed in ounces, on December 31, 1755. Not only were bank notes payable

¹ Murray, James A. H., *A New English Dictionary on Historical Principles*. Murray explains that "post" is used here in quasi-adjectival relation to the noun as with the later, similar term "post-dated check." It seems necessary to restate this because of erroneous explanations elsewhere.

² "An Act for enlarging the capital stock of the Bank of England . . .," 7 Anne, Chapter 7, Section LXI (1708) reads as follows: "And it is hereby further enacted . . . that during the continuance of the said corporation . . . it shall not be lawful for any Body Politick . . . to borrow, owe, or take up any sum or sums of money on their bills or notes payable at demand or any less time than six months from the borrowing thereof."

at later dates repeatedly projected here as well as in Europe during the eighteenth century, but some were actually circulated during some decades of that century in Scotland. After the Bank of Scotland, the oldest bank of the country, had been threatened by a run engineered by its newly chartered competitor, the Royal Bank of Scotland, it issued five-pound notes in 1730 payable at the option of the bank on demand or six months after date at £5:2:6. With these credit instruments, later called post notes (bearing five per cent interest) the Bank of Scotland redeemed a portion of its regular notes. The device by which the Bank hoped to avoid future difficulties similar to those encountered during the run, was quickly resorted to by all Scotch banks in times of emergency, until the abuses generated therefrom brought about its prohibition in 1765.³ Bank notes payable not on demand, but at later dates, then, were known when modern banking started in this country, and, in addition, they had already found theoretical treatment. Sir James Steuart in his great work which compiled and elaborated Mercantilist theory had discussed them in connection with the "optional clauses" on bank notes.⁴

The earliest known American post notes were used for payments through the mails in distant places.^{4a} In 1791 the following entry is found in Jefferson's account book: "Re^d from bank a post note payable to Carter Braxton for 116 2/3 D and remitted to him under cover to Dr. Currie for the horse I bought from him."⁵ In this case the post note was not expected to circulate. It was made out for an uneven amount (the price of the horse) and was issued as a bank of today would issue a cashier's check to one having no checking account. At that time it was not customary for individuals to draw checks and Jefferson must have had a bank account, or credit with a bank, or have paid in the corresponding amount, in order to obtain the post note which effected safely the payment of his debt in a distant place. Bank notes, of course, could not be sent without danger of being stolen. The above example gives a clear picture of this special-purpose type of post note, which became obsolete and was superseded by checks and bank drafts, when banks began to multiply over the country. From the outset the First Bank

³ Davis, Andrew McFarland, *Currency and Banking in the Province of the Massachusetts Bay* (New York, 1901), II, pp. 129 and 276. Smith, Adam, *Wealth of Nations*, Cannan Edition, I, p. 308. Kerr, Andrew William, *History of Banking in Scotland* (London, 1902), pp. 53, 54, 86 ff. In 1732 one-pound notes were issued by the Bank of Scotland with similar clauses. The Scotch development was known to Stephen Colwell. (*The Ways and Means of Payment* . . . 2d ed., Philadelphia, 1860, p. 410.)

⁴ Book III of his *Inquiry into the Principles of Political Economy* (London, 1767), reprinted under the title *Principles of Banks and Banking* (London, 1810), p. 224. Steuart's book was well known in America.

^{4a} Prior to the actual issue of the first American post notes they had been suggested by Alexander Hamilton in his (first) bank plan of 1780. In article six he recommended that a certain part of the continental currency be redeemed in notes of the bank which he proposed. Such notes were to be payable to the bearer three months after it had been called together with 2 per cent interest per annum. See *The Works of Alexander Hamilton*, ed. by Henry Cabot Lodge, (New York and London, 1885), III, p. 75.

⁵ "Jefferson's Financial Diary," in *Harper's New Monthly Magazine* (Vol. LXX, March 1885), p. 534.

of the United States issued such post notes payable within thirty days and, in 1792, Hamilton encouraged their use in making them receivable by the collectors for duties. With his consent, too, they were occasionally renewed at the discretion of the bank. This would indicate that in America the instrument was capable of acquiring, in comparison with the original intentions another meaning and of fulfilling a different function.⁶

It is not known exactly when post notes first became a medium of exchange in this country. For this purpose the original instrument had to undergo a slight change and the new type of post note is characterized by being made out for even amounts. In making this change, the banks of this country adopted the eighteenth century bank note, already described, payable at a later specified date. However, whereas the early Scotch "post notes" always drew interest, this was not the case with all those of American make. Some of these bore interest, others not, thus creating considerable confusion.⁷ To contribute further to this confusion, the later type of American post note, that for even amounts, existed in two distinctly different forms: the one for small denominations, only sometimes drawing interest, was expected to circulate as money; while the other for large denominations, always drawing interest, was of the nature of a bond rather than a bank note.

There were two main periods during which post notes were used as a circulating medium in America, the one after the War of 1812, and the other in the depression years of the 1830's and early 1840's. In the first period the Northern and in the later the Southern states were predominantly interested in the monetary device. In 1818 the New York City banks circulated 60 and 90 day post notes; in 1825 interest-bearing post notes were issued in Rhode Island; while around 1820, for instance, statutes in Connecticut, Indiana, and Ohio indicate the same usage in these states.⁸ In the second period, as already indicated, the South provided a fertile field for post notes. Their issue was unavoidable when, after 1837, the Southern banks were so lenient toward their debtors as to allow them to pay in installments. For this purpose post notes had to be permitted in various Southern states, although legal sanction was not always given without a struggle. Governor Clay of Alabama, for instance, represented the opposition in 1837 when the public in that state clamored for the use of the credit instrument.⁹

Once the circulating medium of doubtful character had come into existence first in the 1810's the various legislatures had to take a stand. The reaction was

⁶ Konkle, Burton Alva, *Thomas Willing and the First American Financial System* (Philadelphia, 1937), pp. 157, 160. Wettereau, James O., "New Light on the First Bank of the United States," *Pennsylvania Magazine of History and Biography*, Vol. LXI, p. 282.

⁷ Sumner, William Graham, *A History of Banking in the United States* (New York, 1896) p. 234; Dewey, David Rich, *State Banking before the Civil War*, U. S. 61st Congress, 2d Session, Sen. Doc. 581, pp. 104 ff.

⁸ Publicola, *Vindication of the Currency of the State of New York and a Review of the Report . . . addressed to the Hon. Isaac Pierson* (1818), p. 21. Hale, Nathan, *Remarks on the Banks and Currency of the New England States* (Boston, 1826), p. 40.

⁹ Seroggs, William Oscar, *The Financial History of Alabama, 1819-1860*, (Harvard Ph.D. Thesis, 1911), pp. 68, 72.

not uniform. Post notes were permitted in some states as for instance, in Connecticut¹⁰ in the North and Alabama in the South. In other states such as New York in 1829 and Ohio in 1819 and 1820, they were completely forbidden. In Louisiana they were adopted only as a temporary emergency measure.¹¹ Massachusetts wavered. The legislature forbade post notes, i.e., "notes or other credit instruments payable at a future date or bearing interest," in the session of 1829; permitted them in the session of 1835; and again withdrew permission in 1837. In the Act of 1835 post notes were permitted to an amount not exceeding 25 per cent of the actually paid-in capital of the issuing bank, on the condition that at least $4\frac{1}{2}$ per cent interest be paid. The wording of these Massachusetts post notes, as given by Sumner, "payable to AB or bearer," indicates that they had become or at least were on the way to becoming bearer instruments, a development which was cut short, however, because the instrument was definitely abandoned in the 1850's.¹²

Certainly there were serious objections against these notes—particularly against the small circulating post notes, especially when they did not bear interest. Then they were nothing but loans of the banks forced upon an unwilling community. The Ohio Bank Commissioners of 1839 described and con-

¹⁰ Revised Statutes of 1821, Title 6, Chapter 12, Sec. I.

¹¹ In Louisiana the issue of post notes as an emergency measure was much discussed during the depression of the late 1830's and early 1840's. In the session which convened in December 1837 the legislature passed a bill which aimed at a reorganization of the Louisiana banking system. Banks accepting this act as an amendment to their charters were permitted to issue post notes in denominations above \$20 which, however, were payable on March 1, 1840. They were limited to 20 per cent of the capital of the commercial banks and 30 per cent of the capital of the land and utility banks. This bill was vetoed because the governor, among other reasons, considered the authorization of post notes illegal. In 1839 another bill permitting post notes was offered, but not passed; whereupon the New Orleans banks on invitation of the City Bank of New Orleans took up the question among themselves. Since the Bank of Louisiana and the Citizens' Bank opposed the idea submitted of issuing post notes without legal sanction, the matter was dropped. The City Bank, however, acting alone, issued post notes, payable neither on demand nor in specie, but receivable on deposit and for certain payments, until January 1841 when the Louisiana legislature definitely outlawed all post notes. However, in 1842, when the state passed the famous reform act, post notes, as proposed in the vetoed bill of 1837, were legalized for a short period. These notes were payable on September 30, 1842. The total amount was fixed and then distributed, so that each bank got its quota. Post notes were to be secured by specie, by Louisiana state bonds, or by promissory notes secured by mortgages; and in each case the issues were limited to twice the amount of specie in the vaults of the issuing bank.

Helderman, Leonard C., *National and State Banks* (Boston and New York, 1931), pp. 93 ff. Heck, Harold J., *A History of Banks and Bank Legislation in Louisiana* (unpublished Ph.D. thesis, New York University, 1939), pp. 71 ff.

As to Ohio: Bogart, E. L., *Financial History of Ohio* (Urbana-Champaign, 1912), p. 269.

New York, *Session Laws*, 1829, Chapter 94, Sec. 35 (Safety Fund Act); *Sess. Laws*, 1840, Chapter 363, Sec. 4, amended 1850, Chapter 251.

¹² *Mass. Sess. Laws*, 1828, Chapter 97, section 25; *Mass. Sess. Laws*, 1835, Chapter 255; *Mass. Sess. Laws*, 1837, Chapter 224. Sumner, William Graham, l.c., p. 234 and Lake, Wilfred Stanley, *History of Banking Regulation in Massachusetts, 1784-1860* (unpublished Ph.D. thesis, Harvard University, 1932) deal with this material.

demned them substantially as follows:¹³ They are issued by banks for the purpose of extending their circulation and are made payable without interest at a future date, sometimes in six to twelve months. They should meet the unqualified disapprobation of the community, for they are paid out to depositors and borrowers at par, whereas they are due only after several months. This is identical with usury, for the banks receive in return from the borrowers three-months bills or promissory notes, on which the latter have to pay interest. At the same time, by this method the banks get funds for the redemption of their own obligations long before they fall due and can profit from the money.

As already mentioned, these circulating post notes passed out of existence at the end of the period under investigation. But wherever and whenever they were forbidden, banks tried to achieve the same result by more devious means, that is, by lending notes under questionable conditions: the notes were to be kept in circulation by the borrower for a certain length of time or they were not to be put into circulation before a certain date, and so on. To prevent such evasions then, Massachusetts tried to stop these loopholes in the Act of 1837 which again made the issue of post notes illegal and which bears the revealing title: *An act to restrain banks from issuing their notes otherwise than for immediate circulation.*

It has already been stated that the small circulating post notes tended to increase the circulation of the bank in question and that they represented a loan floated by the bank. The latter was the only function of those post notes which were issued in large denominations, invariably drew interest, were not supposed to circulate, and corresponded in character to treasury bills. That this purpose was clearly seen in those years is shown by the title of the Massachusetts Act of 1835; *An act authorizing banks to borrow money and issue post notes.* In fact, in the absence of a banker's bank, American banks without correspondents abroad had no other means of borrowing funds, and in times of crisis or stringency such borrowing often became imperative.

This second form of the standardized post note, the post note in large denominations, seems to have been already known shortly after 1800. In a pamphlet of 1810 we find the following remark:¹⁴ "Let not the reader imagine that these deposits were of eagles and dollars or even bank bills. No, they were of that unmeaning kind of paper, called post notes, in which the blanks are as easily filled with a million as one hundred dollars." This type of post note reached its greatest importance in the depression which followed the crisis of 1837. In March of that year, that is, about two months before the crisis broke, numerous American drafts on England returned protested because of the failure of three of the largest so-called Anglo-American merchant bankers in that country. A committee of New York bankers applied for help to Nicholas Biddle, then president of the United States Bank of Pennsylvania. He agreed to issue \$5,000,000 in twelve-months post notes (bonds), payable in London with the

¹³ U. S. 26th Congr., 1st sess., Exec. Doc. 172, pp. 996, 997.

¹⁴ Atwater, Jesse, *Considerations on the Approaching Dissolution of the United States Bank in a Series of Numbers*, (New Haven, 1810), p. 16.

Barings or in Paris or Amsterdam, respectively. Three of the leading banks of this country then followed his example and issued similar post notes; viz, the Morris Canal and Banking Company, \$1,000,000; the Bank of the Manhattan Company, \$2,000,000, of which \$1,000,000 was payable in America and \$1,000,000 in London; and the Girard Bank, \$500,000, payable in London. It was understood that these post notes would be traded in Europe. Consequently the American merchants, who could not get any foreign exchange at that time, acquired them by discounting their receivables and used them for remittances: that is, these post notes fulfilled the function of money in international commerce. In England they were traded at the stock exchanges, and these operations of Biddle highly impressed British capitalists.¹⁵ Biddle himself in a letter of April 8, 1841, claimed to have come to the rescue of New York by the issue of these notes.

This action had the following implications: first, the strongest American banks borrowed funds on their own names and made them available to the business community. Secondly, in consequence thereof, solvent firms were saved from disaster: because of lack of specie and confidence they would have been unable to get any tender with which to meet their obligations at home or abroad.¹⁶ Thirdly, the issue of these post notes, which were made payable in Europe, was identical with creating foreign exchange, that is, with an exchange manipulation. When European capitalists bought them, short term capital was *ipso facto* transferred from Europe to America, as is done today by deliberate and judicious action of co-operating banks and central banks.

II

Another type of circulating medium, which no longer exists, but which played a certain part during the first half of the nineteenth century, is the bank note, payable at a place other than the place of issue. Thomas Hart Benton in one of his speeches described its origin as follows:¹⁷ "It began in Scotland some years ago with a banker in Aberdeen, who issued promissory notes payable in London. Then the Bank of Ireland set her branches in Sligo, Cork, and Belfast at the same work; and they made their branch notes payable in Dublin. The English country bankers took the hint and put out their notes payable in London. The mass of these notes were the smaller denominations—such as were handled by the laboring classes, who could never carry them to London and Dublin to demand their contents. At this point the British Imperial Parliament (sic!) took cognizance of the matter; treated the issue of such notes as a vicious practice, violative of the very first idea of a sound currency and particularly dangerous to

¹⁵ Sumner, op. cit., p. 218. McCrane, Reginald C., *Foreign Bondholders and American State Debts* (New York, 1935), p. 16. Biddle's letter in Exec. Doc. 226, 29th U. S. Congr., 1st sess, pp. 475 ff.

¹⁶ In so far as weak banks issued post notes to weak customers the collapse of both, in most cases, was only delayed and therefore became all the worse. However, weaker banks and weaker customers were more likely to issue and to receive, respectively, the small circulating post notes.

¹⁷ *Thirty Years View* (New York, 1854), Vol. I, p. 224.

the laboring classes. The parliament suppressed the practice. This all happened in the year 1826." Benton's description cannot be considered, of course, as a reliable source. As a matter of fact, as early as 1781 Alexander Hamilton proposed the issue of this type of notes in his (second) bank plan. In article seven he suggested two kinds of notes: "one payable only in America, the other payable either in America or in any part of Europe where the bank may have funds." His idea was thereby "to raise the demand for bank notes by rendering them useful in foreign commerce."^{17a}

Bank notes payable at other places than the place of issue may or may not fulfill legitimate functions. When they were issued in order to make redemption difficult or impossible, the device was an abuse and stood on the same level as the forming of wild-cat banks in inaccessible places or the issue of notes by brokers and correspondent banks in remote states, the latter often being done on a mutual basis.¹⁸ However, the same plan in many cases represented legitimate business policy, beneficial to the community. Nathan Appleton in one of his writings remarked¹⁹ that "bank notes to institute a sound medium of general circulation must be payable in the central points of trade." It is these central points of trade to which bank notes tend, once they are issued in smaller places. It was therefore sound practice when country bankers made part of their notes payable with an agent in cities to which their notes would flow because of the natural current of trade, as, for example, issuing notes in Tennessee payable in New Orleans. This was identical with creating domestic exchange.²⁰

Fortunately, some figures exist which give an idea of the extent of this sort of business. The Union Bank of Tennessee in Nashville, for instance, had in circulation:

On January 1, 1837.....	\$1,730,400 payable at New Orleans
	154,395 payable at Philadelphia and New York
	69,940 payable within Tennessee
On October 1, 1837.....	576,345 payable at New Orleans
	55,860 payable at Philadelphia and New York
	177,035 payable within Tennessee. ²¹

Competing Nashville banks seem to have followed the example of the Union Bank of Tennessee, and some banks in other states adopted the same practice. The Bank of Illinois, for instance, had issued a few thousand dollars worth of

^{17a} Alexander Hamilton, op. cit. III, pp. 109, 110.

¹⁸ Examples are given by Bogart, op. cit., p. 288 or James, F. Cyril, *The Growth of Chicago Banks* (New York, 1938), p. 227.

¹⁹ *An Examination of the Banking System of Massachusetts* (Boston, 1831). The same idea is expressed also in his later *Remarks on Currency and Banking* (Boston, 1841), p. 9.

²⁰ The Commercial Bank of New Orleans was, for instance, the redemption agent of the Union Bank of Tennessee. U. S. 25th Congr., 2nd sess., Exec. Doc. 79, p. 620. The Suffolk System was based on the same fundamental idea.

²¹ Trotter, Alexander, *Observation of the Financial Position and Credit of such of the States of the North American Union as have contracted Public Debts* (London, 1839), pp. 257 ff.

such notes, some of which were payable in Louisville, Kentucky, and some in New York.²² When the crisis broke in 1837 and the anticipated flow of cotton and Western produce and of remittances based on cotton and produce exports and shipments, became a trickle, the issues of interior banks, payable in New Orleans or New York, became very embarrassing to these banks and they abandoned the practice.

However, the device survived in the 1840's in the much-praised business policy of the Chicago banker, George Smith. As will be remembered, he made his notes (correctly: his certificates of deposit) payable not only in specie at the place of issue, Milwaukee, but also in domestic exchange in Chicago, Detroit, Buffalo, Galena, Cincinnati, St. Louis, and New York. This he was able to do because his notes were issued by discounting bills of exchange drawn by shippers of Western produce, which produce tended toward the same centers of trade as did the notes.

III

The often described so-called branch drafts of the Second Bank of the United States were first issued in 1827, and a large amount of them circulated during the years following. Some contemporaries, such as Senator Benton, considered them as essentially identical with notes payable at other places than the place of issue. However, there is no more than a kernel of truth in his assertion. According to the charter of the Second Bank of the United States, its notes had to be signed by the president and countersigned by the cashier; and this rule obtained not only for the notes to be issued by the mother bank, but also for those of the branches. This was, as a matter of fact, physically impossible when business grew. The bank, in 1818 and 1821, had already applied to Congress for a remedy, but in vain. Consequently, in 1827 Biddle decided to have the officers of the branches draw on the cashier of the mother bank. These drafts were then endorsed like post notes and circulated. For this purpose the blank forms were standardized, made similar in appearance to the genuine notes of the bank, distributed by the mother bank, and filled out at the branches for such even amounts (\$5 and \$10) as were customary, also, for the bank notes. These branch drafts were payable at the mother bank, and were redeemed at the branches voluntarily.

The documents published with the Clayton Report of 1832²³ do not indicate whether or not, in devising these branch drafts, Biddle was influenced by the British events of 1826, mentioned by Senator Benton. This is not impossible, since, as already indicated, there is, as to one point, a certain similarity between branch drafts and notes payable at places other than the place of issue. At the same time, however, there is as just mentioned also something of the post note in these branch drafts, and finally, they were drafts, not notes at all. Their main function was, of course, getting around the inadequate provisions of the charter;

²² U. S. 25th Congr., 2nd sess., Exec. Doc. 79, p. 779.

²³ U. S. 22nd Congr., 1st sess., House Doc., No. 460, pp. 49 ff.

but once devised they could also be issued and used judiciously as domestic exchange, just as were notes payable at other places than the place of issue.

IV

The branch drafts of the Second Bank of the United States had scarcely gone out of existence in the 1830's, when a new sort of circulating medium made its appearance in what was then the Northwest of this country; viz, the illegally circulating certificate of deposit. This instrument is closely connected with the activities of George Smith, who has already been mentioned. Certificates of deposit, the device of the London goldsmiths, had been used throughout the eighteenth century by the Bank of Amsterdam, which did not issue bank notes. An early American writer, the Massachusetts lawyer and statesman, James Sullivan, described them as follows:²⁴ "This bank makes no negotiable bills, but gives receipts for money deposited, which are good to the possessor for the sum mentioned and which may be transferred by certain established forms."²⁵

In America the circulating certificate of deposit originated in 1837. In the preceding year, the Chicago Marine and Fire Insurance Company had been chartered. Its charter prohibited the new corporation from assuming banking powers and especially from issuing bank notes; but gave it the right to lend on bottomry and respondentia. This right to finance certain shipping activities was abused by the corporation as the basis for currency issue. Certificates of deposit in even amounts from \$1 to \$500 were issued during the panic as a circulating medium in exchange for deposits, lodged and created alike, but most of them were withdrawn shortly afterwards. George Smith, a Scotchman, who had come to Chicago in the 1830's, had watched this experiment and seen the great business possibilities under the particular banking conditions then in existence in the Northwest. He copied the Chicago Marine and Fire Insurance Company, applying for an identical charter in Wisconsin, and, after having received it, his Wisconsin Marine and Fire Insurance Company issued certificates of deposit in round denominations, payable to bearer and redeemable as described before. The issues ranged in amount from \$29,000 in 1841 to \$1,470,000 in December 1851. George Smith's certificates of deposit were in every respect but form, identical with bank notes. It makes no real difference, of course, whether a banker discounts commercial paper and pays out bank notes or creates first a deposit and then hands out certificates of deposit. The history of this

²⁴ *The Path to Riches* (Boston, 1792), p. 26.

²⁵ With regard to the last clause, Sullivan confounds transfers in the books of the Bank of Amsterdam and certificates of deposit (depositor receipts). The latter could be transferred without any formality, and were renewable. Their wording was "On the . . . A. B. deposited 1000 Louis d'or with the Bank at a rate of 10 florins and 4 sous a piece, under the condition that he will be obliged to take them back within six months and to pay 1/2 per cent to the Bank. Should he fail to fulfill this condition after the expiration of these six months they will pass into the possession of the Bank at the same price as mentioned above." van Dillen, J. V., *The Economic History of the Netherlands and the Bank of Amsterdam, 1609-1820* (Amsterdam, 1929), p. 53.

illegal, although intrinsically excellent, bank money has been described elsewhere.²⁶

The picture would not be complete if we did not at least mention the batches of illegal scrip, which haunted various sections of this country from time to time during the period under investigation. Scrip is not bank money, of course, and consequently does not fall within the scope of this paper. But it is worthwhile to stress the great similarity between the American scrip issues of the nineteenth and the Scotch issues of the eighteenth century.²⁷

²⁶ For instance, James, *op. cit.*, pp. 201 ff.

²⁷ Kerr, *op. cit.*, pp. 86, 87.

THE HIGH-COST-OF-LIVING PROBLEM AFTER WORLD WAR I

E. JAY HOWENSTINE, JR.

Park College

[The writer wishes to acknowledge the many patient and helpful criticisms of Dr. H. Gordon Hayes of Ohio State University throughout the writing of this manuscript.]

I

The high-cost-of-living problem after World War I was in reality only one aspect of the price-level problem which baffled public officials, business men and consumers throughout the entire period of postwar readjustment. In the earlier phases of the problem the major issue had been whether the price level ought to fall sharply or be stabilized at a permanently higher level.¹ The possibility was not seriously entertained, except by a few economists, that the price level might undergo still further inflation. Thus things went along relatively smoothly on the price front as far as the public was concerned until prices made over a 4 per cent rise in July 1919. The issue was then brought swiftly to the point of political crisis on July 30 when the Railroad Brotherhood unions addressed a warning to President Wilson that unless some drastic action were taken and taken at once to reduce the high cost of living they would be forced to present demands for wage increases totalling \$800,000,000 and covering some 2,000,000 railroad workers.²

Hastily President Wilson appointed a Cabinet committee to prepare a plan of action. On August 8 he went to Congress with a special message recommending a legislative program to solve the problem. And within ten days after the railroad union ultimatum the country was a seething army of angry consumers demanding the scalps of those responsible for the high cost of living.

II

An examination of the economic literature of the time and of the opinions of economists assembled through a survey of the Reconstruction Research Division of the Council of National Defense shows a high degree of agreement on six major causes of the high cost of living, namely, (1) credit inflation, (2) curtailment of production, (3) increased exports and foreign credits, (4) buying extravagance, (5) profiteering and hoarding, and (6) speculation and the speculative psychology.³

¹ The writer has examined an early phase of the price problem after World War I, the price reduction movement, in another article, "The Industrial Board of 1919; Precursor of the NRA", *Journal of Political Economy*, (June 1943).

² *Commercial and Financial Chronicle*, CIX (August 2, 1919), pp. 432-3.

³ The opinions of the foremost economists in the United States were solicited by the Reconstruction Research Division with reference to its pamphlet, *An Analysis of the High Cost of Living Problem*, August 16, 1919, and are to be found in personal letters in the Council of National Defense Records, Archives.

Practically all economists were agreed that the primary reason for the tremendous rise in the price level was credit-expansion, and to a minor extent increase in volume of the currency. The Committee on War Finance of the American Economic Association reporting at the Christmas meeting in 1918 found that in five respects Federal Reserve and Treasury policy had been to a large extent responsible for the wartime inflation that had doubled the price level in November 1918 as compared with the 1914 average.⁴ (1) Federal Reserve authorities had followed a low-rediscout-rate policy in order to facilitate the sale of government bonds; (2) the Federal Reserve Board and the Treasury had urged a policy of "borrow and buy" in selling government bonds; (3) the Treasury had resorted to anticipatory borrowing by the issue of Treasury certificates of indebtedness; (4) a gold embargo had been levied on gold shipments, and (5) the government had followed the policy of stimulating gold production by subsidizing gold producers.⁵ At the end of 1918, according to Dr. A. C. Miller, economist member of the Federal Reserve Board, approximately \$6,000,000,000 of government bonds and certificates not yet absorbed by permanent investment were being carried by the banking system.⁶

After the Armistice, demands were widespread from the economic profession that postwar fiscal policies be placed on a sounder basis. Federal Reserve authorities were fully aware of the inflationary nature of their policy,⁷ but the pressures of the situation in addition to the failure of Congress to levy sufficient taxes for the fiscal year 1919 prevented a reversal of wartime inflationary policies with the exception of the gold embargo which was removed in June 1919.⁸ With government expenditures for 1919 running \$18,500,000,000, Congress passed a tax bill designed to raise \$6,000,000,000 but which actually raised only \$5,100,000,000. The resulting burden of financing the deficit was placed to a large extent on the banking system.⁹ The coming of peace therefore did little to reduce the inflationary tendencies of wartime, and in fact actually intensified the spiral upward as was clearly reflected in the rising costs of living.

Secondly, the widespread curtailment of production combined with the inflated money and credit media to throw the proportion of goods and buying power even more out of balance. Some of the curtailment of production was unavoidable, but for the most part it was due to faulty economic planning and the lack of prospects for profit. In the early months of peace there was a period which varied in length from industry to industry during which conversion from

⁴ Bureau of Labor Statistics wholesale price index, *Standard Trade and Securities*, LXXXVIII (April 29, 1938), Sect. D, p. 6.

⁵ Committee on War Finance of the American Economic Association, "Report", *American Economic Review*, IX (March 1919) Supplement No. 2, pp. 126-7.

⁶ A. C. Miller, "After-War Readjustment—Liberating Gold", *Proceedings of the American Economic Review*, IX (March 1919) Supplement No. 1, pp. 138-9.

⁷ See for example *Federal Reserve Bulletin*, V (June 1919), p. 524.

⁸ *Ibid.*, (July 1919), pp. 615-6.

⁹ *Annual Report of the Secretary of Treasury*, 1920, p. 601; see also Roy G. and Gladys C. Blakey, "The Revenue Act of 1918", *American Economic Review*, IX (June 1919), pp. 213-43. *Statistical Abstract of the United States*, 1937, pp. 163-4.

a war- to a peace economy necessarily curtailed production. Unfortunately there are no data on the rate of conversion, but if the steel industry be taken as a reliable index of readjustment for those industries most seriously affected, (and in view of the strategic role that steel played in the war machine this appears justified) the technical readjustment was well on the way to completion by 1919.¹⁰ Taking the economy as a whole, the problem was of even less importance because the industries which had been organized entirely on a war-production basis were relatively few, and hence the technical transition back to peace production was accomplished with relative ease and speed.

Curtailement in production of a much more serious nature, however, occurred because of the lack of profitable prospects for business. During the war there had been an absolute scarcity of goods. As the report of the Council of National Defense on the high cost of living stated, the economic watchword of war time was "output and more output."¹¹ There was no problem of markets to worry the business man; it was only a matter of production. With the return of peace the situation was reversed. Profitable markets became essential and the economic needs of the nation and of the world became a minor consideration. Soon there developed exaggerated fears of overproduction on the one hand, and industrial stagnation on the other. A restriction of production of more than 50 per cent followed in sixteen out of the twenty-two principal industrial groups of the country.¹²

With business following a systematic policy of contraction, labor and agriculture soon followed with similar restrictive techniques to maintain some semblance of balance of bargaining power. Labor demands for a permanent eight-hour day with higher wages were expressed everywhere, and there was widespread criticism of the inefficiency of labor by employers.¹³ Although the disappearance of patriotic stimulus and co-operative war management tended to lower labor efficiency, in other respects the return of peace increased the efficiency of labor. For one thing, a considerable amount of marginal and sub-marginal labor that had been drawn into employment because of the war-labor shortage was let out of employment as the armed forces were demobilized and as war workers returned to old jobs. A second factor was the fear of becoming unemployed mentioned by the *New York Tribune* as the reason for a 20 per cent increase in efficiency of workers at the Hog Island shipyards after the Armistice.¹⁴ The opposing factors tending to increase or to decrease labor efficiency practically

¹⁰ *New York Times*, December 14, 1918, p. 15; February 25, 1919, p. 16.

¹¹ *Council of National Defense*, *op. cit.*, p. 17.

¹² *American Industries*, "Business Suffering from After-War Uncertainty", editorial, XIX (April 1919) p. 7.

¹³ Benjamin Anderson attributed great importance to this factor, (Letter in Council of National Defense Records), and David Friday made "the growing inefficiency of labor" the "prime cause of rising prices" in 1919 and 1920. David Friday, *Profits, Wages, and Prices*, (Harcourt Brace & Co., 1921) pp. 138-9. Neither one, however, submitted any evidence for his opinion.

¹⁴ *New York Tribune*, November 21, 1918, p. 4.

offset one another, so the per capita output in manufacturing in 1919 was less than two tenths of one per cent below that of 1918.¹⁵

Agriculture, much less apt in the art of restrictionism and lacking the ethical justification for withholding production which the business corporation had long cultivated, was slower and more hesitant about taking steps in direct opposition to the urgent needs of the world. The wheat farmers had already secured a government guarantee of \$2.26 per bushel for the 1919 crop, along with a subsequent billion dollar appropriation to carry the guarantee out, so their profit margins were protected. The cotton producers, however, did not have such a guarantee, and so proceeded to enlist the cotton-growing states in a "safe-and-sane-cotton" program that called for (1) withholding the 1918 crop until a price of at least thirty cents a pound was secured, and (2) reduction of cotton acreage for the 1919 crop by one third.¹⁶ Although arousing initial enthusiasm among the southern states, even among business men and bankers, the movement petered out for lack of effective group control such as was possible in industry. Only 6 and 5 per cent reductions respectively actually took place in cotton acreage and cotton output.¹⁷ This restrictionist movement did, however, contribute to the rise in cotton prices from about 24.5 cents a pound in February, March, and April 1919 to 36.5 cents on November 1, 1919 with resulting higher prices for clothing.¹⁸

A third important inflationary pressure came from increased exports and foreign credits. Although some economists, e.g., Benjamin Anderson, emphasized the increased physical volume of exports, the diversion of goods from American markets to European channels probably was not as significant a factor in further price inflation in the United States as the fact that imports did not begin to keep pace with our exports and that the resulting necessity of financing the balance was not adequately met.¹⁹ The \$1,800,000,000 increase in value of exports in 1919 was more apparent than real, for in 1919 the actual physical volume of agricultural exports declined 7.5 per cent from the wartime peak of 1918,²⁰ although exports of finished manufactured goods showed an 18.2 per cent increase over 1918.²¹ Moreover, exports in 1919 were \$4,000,000,000 in excess

¹⁵ Hoover Committee on Recent Economic Changes. *Recent Economic Changes*, Vol. II, (McGraw Hill, 1929) p. 454.

¹⁶ *Literary Digest*, "The South on a Cotton Strike", LX, (March 22, 1919) p. 20.

¹⁷ *Yearbook of Agriculture*, 1935, p. 426.

¹⁸ *Ibid.*, 1920, p. 640; also *Commercial and Financial Chronicle* CIX (Nov. 8, 1919) p. 1753.

¹⁹ Benjamin Anderson placed primary importance on the export situation, and Roy Blakey placed it second in importance. Letters in Council of National Defense Records. Likewise the Treasury (*Annual Report of the Secretary of Treasury*, 1919, p. 18) and the Federal Reserve Board placed great emphasis on the increased foreign demand during 1919. *Federal Reserve Bulletin*, V (July 1919), pp. 613-5; (September 1919), p. 817; Sixth Annual Report of the Federal Reserve Board, 1919, p. 70.

²⁰ Index of 44 major agricultural export commodities which for all practical purposes was equivalent to total agricultural exports. *Yearbook of Agriculture*, 1935, p. 635.

²¹ Current value data, (*Survey of Current Business*, Annual Supplement, Department of Commerce, 1936, p. 68) corrected by Bureau of Labor Statistics Finished Products Wholesale Price Index.

of our imports and in 1920 the excess amounted to \$3,000,000,000.²² This export surplus was financed not from net increases in savings, but from further credit expansion through both the Treasury and the banking system. At the end of 1919 the Federal Reserve Board estimated that the commercial banking system of the country was carrying \$2,000,000,000 of foreign credits, directly and indirectly; another \$2,000,000,000 had been financed by direct Treasury advances to foreign governments and the remainder by sale of foreign bonds in American markets and in other ways.²³

The needs of relief and reconstruction in Europe were, however, so urgent that they should have been met at any reasonable cost, and although this aftermath of the war did add further to the stresses and strains in our credit system, it was a small enough burden to share in comparison with the contribution that was thereby being made to the rehabilitation of Europe. Moreover there was a widespread feeling in the business world that if greatly expanded foreign markets could not be found immediately after the war, our economy would suffer from overproduction and depression. In this view the volume of exports was a god-send and not a disrupting factor.²⁴

Fourthly, consumer reaction to the stringent wartime economics took the form of almost riotous extravagance during most of 1919, particularly just before the height of the popular outcry against the problem. Somewhat typical of a great part of the buying public, lumber-jacks were, for example, reported to be buying \$3,000 automobiles, silk shirts at \$10 and \$12, and neckties at \$5, while their wives and daughters were wearing hats costing as high as \$20 and silk hose that sold for \$2.50.²⁵ Likewise the National Association of Manufacturers' survey in March had shown the only five prosperous lines of industry to be (1) jewelry and silverware, (2) musical instruments, (3) vehicles, (4) rubber, and (5) tobacco.²⁶ For a while after the first part of August a damper was clamped down on the extravagant buying partly through publicity and partly through consumer education, but by December the craze was again on the upswing.²⁷ Such indiscriminate buying was in turn an open invitation to sellers to boost prices still further.²⁸

²² *Statistical Abstract of the United States*, 1937, p. 433.

²³ *Sixth Annual Report of the Federal Reserve Board*, 1919, pp. 24-5. At the end of 1920 John H. Williams estimated that the bankers and exporters were carrying \$2,852,000,000 of short-term export credits with the burden growing heavier month by month. John H. Williams, "The Foreign Trade Balance of the United States Since the Armistice", *American Economic Review*, XI (March 1921), Supplement, p. 36.

²⁴ *Federal Reserve Bulletin*, V, (September 1919), p. 892.

²⁵ *New York Times*, August 17, 1919, Section 3, p. 1.

²⁶ *American Industries*, "Business Suffering from After-War Uncertainty", XIX (April 1919) p. 7.

²⁷ *Federal Reserve Bulletin*, VI (January 1920), p. 21.

²⁸ Economists emphasizing this element, along with the Federal Reserve Board, were Benjamin Anderson, Roy Blakey, and Thomas Nixon Carver. Letters in the Council of National Defense Records. See also Carver's comments, *Commercial and Financial Chronicle*, LX, (January 3, 1920), p. 32. Secretary Glass also attributed primary importance to "reckless spending" as a cause of rising prices. *Ibid.*, (January 24, 1920), pp. 309-10.

Profiteering was a fifth factor closely associated with consumer extravagance that contributed to postwar price inflation. By profiteering, economists referred to any form of manipulation of the scarcity of goods or services in order to increase their value as measured in terms of price. Broadly speaking this would include the whole policy of restrictionism as practiced by business.²⁹ But in its more common, restricted economic usage it applied to (1) hoarding and withholding supplies for an increase in price;³⁰ (2) offering of reduced quality or service for the same money income out of proportion to changes in the price level;³¹ (3) deliberate raising of price beyond cost increases. Profiteering as above defined was to a large extent a result of basic economic conditions rather than a primary cause. For example, a period of rapidly rising prices was in itself a period of profiteering almost in the very nature of the case unless all along the line of production and distribution prices were scrupulously raised only as rapidly as costs rose and all increases in inventory values passed on to the final consumer. This was particularly true when consumer vigilance, discrimination, and if need be boycott, were thrown to the wind in buying habits.

A sixth important factor was the rampant speculative fever that swept over the country, driving call-money rates above 20 per cent, causing runaway land speculation in certain parts of the country and inviting attempts to secure "corners" in certain food markets.³² The speculative mania was in turn responsible for lending an inflationary atmosphere to the business and trading world as a whole.³³

Other minor factors that were mentioned by different economists were (7) delay in peace,³⁴ (8) wastes in distribution system,³⁵ (9) class conflicts.³⁶ Another prominent economist, Harold G. Moulton, approaching the problem of inflation from the standpoint of production rather than from the angle of exchange and credit explained the problem in terms of increased costs.³⁷ Sizing up the problem in the above manner, the economists of the country could offer no plan promising a solution overnight, except through the processes of forced liquidation or panic.

²⁹ Thorstein Veblen, *Theory of Business Enterprise*, (Scribners, 1904), Chap. III.

³⁰ Council of National Defense, *An Analysis of the High Cost of Living Problem*, p. 14, Data on Storage Hoarding.

³¹ *Ibid.*, p. 9.

³² Myron Watkins and Benjamin Anderson emphasized speculation as a factor. Letters in the Council of National Defense Records. Herbert Hoover attributed a major part of the high price of food stuffs to the world-wide speculation in food supplies. *New York Times*, October 30, 1919, p. 17; The National City Bank warned of land speculation in farms as early as July 1919. *National City Bank Bulletin*, July 1919, p. 6.

³³ Alvin Johnson held the general inflationary psychology to be of considerable importance. Letter in Council of National Defense Records.

³⁴ Henry Seager, Letter in Council of National Defense Records.

³⁵ E. C. Hayes, Letter in Council of National Defense Records.

³⁶ *Ibid.*

³⁷ Harold G. Moulton, "War Finance and the Price Level", *Journal of Political Economy*, XXVII, (October 1919), pp. 694-717; "Will Prices Fall", *Ibid.*, (November 1919), pp. 782-97, "Banking Policy and the Price Situation", *American Economic Review*, X., (March 1920) Supplement, pp. 156-75.

The inflated credit base could not have been deflated in an orderly manner except by increased saving throughout the economic system, a long-time process at the best. Curtailment of production could not have been ended, except through a comprehensive national plan for labor-management-government co-operation to eliminate unemployment, wastes and inefficiencies, which in turn would have involved considerable modification of the business structure of America. Exports could not be decreased until Europe had passed the danger point and was on its feet again. In other words, considering the temper of the country and the needs in Europe, no immediate relief could be promised to a sorely pressed public. The seed had already been sown; the harvest was just beginning to be reaped. It will probably always be true of the public, unversed as it is in the principles of economics, that it fails to understand that when economically unsound policies are adopted, bad results follow, and no matter how much effort and enthusiasm they are willing to use to bring back "good times," cause and effect cannot be put aside by mere wishing. Therefore the basic solution of the high cost of living problem urged by economists was "Work and Save." But this kind of plan did not offer immediate, concrete results; it did not bring about an apprehension of the "responsible parties" that the public demanded. Yet reduced to its primary elements that was the only method that could be expected to cope with the basic problem. Economists in their communications to the Council of National Defense made other suggestions, however, which did promise a certain amount of minor relief in the immediate future; (1) a revival of anti-trust action, (2) improved buying habits, (3) control of speculation, (4) certain banking policies, e.g., raising rediscount rates, interest-rate control, etc., (5) rehabilitation of the transportation system on land and water, and (6) improved methods of distribution. Measures suggested for removing the problem in the long run were (1) a nation-wide statistical information service, primarily for business, continuing the practices established during the war, and (2) the setting up of an industrial council system throughout the nation to provide for collective bargaining and union-management co-operation.

III

By the first of August, 1919, the public was in the mood to track down and hang the criminals responsible for the outrageously high cost of living. The vast invisible economic forces that were the basic causes, however, did not provide an appropriate scapegoat, nor would it have occurred to the public that it was itself primarily responsible for determining the economic institutions that shaped credit and production policies in war and peace. Such an approach would have necessitated a painful revolution in many sacred prejudices, loyalties and ideas. What the public wanted was some person or group of people to which the blame could be attached, and who could then be duly and publicly scalped.

The first butt of public wrath was the business man, the "profiteer." The Federal Trade Commission had published on July 11, 1919 the report of its two-year investigation of the meat-packing industry. According to the report the "Big Five Chicago Meat Packers" threatened to dominate not only meat

products through an international combination, but they had made their way to a position where they would soon dominate all important foods of the country unless immediate and drastic action were taken to prevent it.³⁸ Here then was a cue for a revival of the good old muck-raking, anti-trust days. This of course agreed precisely with the labor-union view of the matter.³⁹ But the business man's round was coming soon.

With ammunition provided by the Railroad Brotherhoods' demands at the end of July, the west-coast railroad strike in August, the Boston police strike in early September, the New York Printers' strike and the steel strike later in September, the New York Harbor strike in October and finally the coal strike on November 1, the business men of the country, supported by a business-dominated press, skillfully diverted a large part of the stream of public condemnation from themselves to the labor unions. The strikes, the selfishness, the radicalism of labor and not the acts of conscientious business men, were therefore to be regarded as the chief cause of the high cost of living.⁴⁰ From then on both business men and labor unions were considered to be "high" criminals, each attempting to "pass the buck" to the other. Other causes that received minor attention in the public and business press were (1) high income- and excess-profits taxes, (2) luxurious spending of consumers, (3) national inflationary psychology, (4) the Kaiser, (5) the delay in peace, (6) low production, (7) waste and (8) irredeemable paper money.

The remedies demanded by the public matched the depth and insight of its causal analysis. The first and most obvious attack on the problem would be a war on profiteers from the corner grocery man to the controller of the meat-packing empire. Secondly, more efficient and continuous production was demanded everywhere from the laborer, although strangely enough not from the business man. Third, an industrial truce for six months and no-strike legislation were proposed to curb the "orneriness" of labor. Fourth, a longer period for paying off the national debt was suggested to provide corporation tax relief. Fifth, better buying habits were urged. The public's analysis of causes and remedies thus dealt to a large extent with superficialities and effects rather than with basic causes.

IV

On August 1, 1919 President Wilson appointed a Cabinet committee to study the problem and prepare a program of immediate action, and seven days later he appeared before Congress with a special message on the high-cost-of-living problem. There was "no complete immediate remedy" he said, because the "free processes of supply and demand" would not resume their normal operations until the peace had been determined. While undoubtedly the unsettled peace was a

³⁸ *Commercial and Financial Chronicle*, CIX, (July 19, 1919), p. 229.

³⁹ *Ibid.*, August 2, 1919, pp. 432-3. Samuel Gompers, "Who Limits Output", *American Federationist*, XXVI (October 1919) pp. 156-60; Gompers, "Capital, Labor, Consumer", *Ibid.*, (November 1919), pp. 1025-8.

⁴⁰ See for example the National Association of Manufacturers' resolution on the high cost of living, *American Industries*, XX, (August 1919) p. 7.

factor in the situation, it was by no means a major factor. It appeared as if President Wilson were attempting to make political capital from the Republican Senators' obstruction of the Peace Treaty. He did, however, recommend to Congress eleven specific measures for dealing with the problem as follows: (1) sale of remaining government surpluses; (2) seizure of food hoards and placing them on the markets; (3) extension of the war Food Control Act both as to time and to commodities covered; (4) legislation regulating cold storage; (5) requirement that all goods in interstate commerce have prices marked on them when leaving the hands of the producer (6) legislation providing for Federal incorporation of interstate corporations with administrative supervision by the Federal Trade Commission; (7) Capital Issues Committee legislation providing for control over speculation and security issues; (8) better buying habits by consumers; (9) temporary taboo on strikes by voluntary union action; (10) fair-price committees to control retail prices, and (11) anti-trust proceedings against combinations.⁴¹

Wilson's approach, while not embodying all the fruit of contemporary economic analysis, was a temperate mixture of all points of view. In meeting the railroad wage crisis, he took a firm position, refusing to grant any pay increases⁴² on the condition that the government be given an opportunity to lower the cost of living, and if unsuccessful then railroad wages would be adjusted along with the rest of the economy.⁴³ In his Labor Day Message he followed up his proposed program with an appeal to labor to do all in its power to increase production, and at the same time to economize as much as possible in consumption. On this occasion also he announced the calling of his first Industrial Conference.⁴⁴ On his western trip he addressed a word of warning to the business men of the country that until a constructive system of labor-management co-operation was put into operation in the industrial world, no permanent relief could be achieved from the high cost of living.⁴⁵ With the exception of the credit aspects of the high cost of living problem, it would appear that Wilson understood the issues with a fair degree of insight, and did not expect miraculous results overnight.

However, the administration's hands were pretty well tied until Congress might act favorably on Wilson's recommendations. Even in the matter of anti-trust proceedings, the Department of Justice needed far larger appropriations than it then had if any large scale attack were to be made. Yet with the exception of an amendment to the Food Control Act providing penalties for violation, Congress refused to enact one single bit of legislation for dealing with the problem. This being the case, Wilson's program could have been expected to make little more than a dent in the cost of living.

⁴¹ *The Public Papers of Woodrow Wilson*, edited by Ray S. Baker & William E. Dodd Vol. V, (Harpers, 1927) pp. 532-71.

⁴² A four-cent increase to shopmen was granted to equalize conditions within railroad labor ranks. *Commercial and Financial Chronicle*, CIX, (August 30, 1919) pp. 835-7.

⁴³ *Ibid.*, pp. 588-9.

⁴⁴ *Commercial and Financial Chronicle* CIX, (September 13, 1919), p. 1042.

⁴⁵ *The Public Papers of Woodrow Wilson*, *op. cit.*, pp. 531-3.

Practically the entire attack on the problem was therefore carried out by the Department of Justice with the meager funds at its disposal. For purposes of analysis the Attorney-General's program may be divided into five parts, (1) prosecutions under the Sherman Anti-Trust Act, (2) prosecutions under the Lever Food Control Act, (3) work of Fair Price Committees, (4) campaign against extravagance, (5) "work and save" campaign in co-operation with the Treasury Department, Federal Reserve Board and others.

Investigations of big corporations required not only a long time to complete and much money to finance, but they frequently involved long-drawn-out court appeals. Concentrating on about eight or ten of the biggest corporations, the anti-trust division started investigations of the sugar trust, the cement combine, the woolen mills and others.⁴⁶ Few of these cases ever reached the stage of court decision. Many of them were dropped and others were settled by voluntary arrangement. Thus for example in December the packers agreed to retire from all allied food industries with the exception of dairying and meat packing, with the corporations to be split up in a manner comparable to that following the American Tobacco and Standard Oil Company decisions of 1911.⁴⁷ Thus, although technically the trusts had been broken, the control remained intact through the devices of holding companies and interlocking directorates. In the American Woolen Company case prices were reduced 18 to 20 per cent without reducing wages when the threat of the law was invoked.⁴⁸

The Food Administration had been forced to suspend activities at the end of the fiscal year on June 30, 1919, because of lack of appropriations, but the Act still remained in force until the President proclaimed the peace. Immediately after the removal of the restraining influence of the Food Administration, dealers in practically every type of food product proceeded to mark up prices and the farm products wholesale price index jumped almost five per cent in July, 1919.⁴⁹ It was this situation which the revival of the Food Control machinery was designed to correct. On October 22, 1919 Congress finally passed an amendment to the Food Control Act recommended by President Wilson and Attorney-General Palmer which put "teeth" into its enforcement. Food hoards were seized all over the United States and brought out of storage, and profiteering charges were brought in 1,049 cases by the end of 1920. Additional violations under other sections of the act brought the total number of prosecutions to 2,016 cases.⁵⁰

The Fair Price Committee machinery had originally been set up during the war under the Food Administration to control food prices. In the high-cost-of-living crisis the Department of Justice appealed to the former Federal food administrators to undertake the direction of fair-price activities in their respective states and to reorganize the county fair-price committees for the new job in view.

⁴⁶ *Annual Report of the Attorney-General*, 1920, p. 184.

⁴⁷ *New York Times*, December 19, 1919, p. 1.

⁴⁸ *Annual Report of the Attorney-General*, 1920, p. 184.

⁴⁹ Bureau of Labor Statistics Farm Products Wholesale Price Index. *Standard Trade and Securities* LXXXVIII, (April 29, 1938), Section D. p. 8.

⁵⁰ *Ibid.*, pp. 183-4.

There was a splendid response to this appeal, approximately 70 per cent of the former administrators accepting their new responsibilities. In states where an administrator failed to respond, the Governor was asked to appoint a director to head up the work, with the result that by the end of the year all states but six had organizations in full swing and approximately 50 per cent of the counties were reorganized on the new basis.⁵¹

Each local committee was to be composed of a wholesaler, a retailer, a representative of organized labor, a representative of the housewives and as many representatives of the community at large as the local chairman considered advisable. Its functions were (1) to investigate costs and prices in foods, feeds, fuel and wearing apparel with the purpose of establishing reasonable rates of profit and reasonable prices that should be charged by the retailers;⁵² (2) to educate the public on profiteering and reasonable prices; and (3) to co-operate with Federal agents in cases being investigated for prosecution.⁵³ The success of the program was of a spotty nature. For example in May 1920 the Assistant Attorney-General was still looking for price reductions to result from the work of the fair-price committees.⁵⁴ It should be noted further that some of the best work done in the field of establishing "fair prices" was done by industries policing themselves through their own trade associations, as e.g., in the case of the National Retail Shoe Dealers' Association and the National Retail Dry Goods Association.⁵⁵

The Division of Women's Activities took over the next part of the Attorney-General's program to make people more consumer conscious and to eliminate the extravagance that characterized buying throughout the nation. An elaborate machinery with local, county, state, and federal organization was brought into play through schools and other organizations with all kinds of publicity, such as a million pamphlets, movies, speakers, press releases, etc. "Conservation" meetings were held in many communities, and "Patch Em and Wear Em" clubs were organized, giving an overall and gingham flavor to the dress fashions of the times.⁵⁶ The fifth part of the Department of Justice attack was a general publicity campaign along with the Treasury Department urging the public to "work and save."⁵⁷

⁵¹ *Ibid.*, p. 17.

⁵² It is interesting to note that the slippery concept of "reasonable profits" and "reasonable prices" returned to plague the Department of Justice, with no more precise solution of the question being achieved here than in the case of the Industrial Board. Palmer even found it necessary to issue a letter to all Fair Price Committees informing them that they had only the power to lower or to endorse present price levels. They had no power to raise prices as some of them had already done! *Commercial and Financial Chronicle*, CIX (September 20, 1919), p. 1129.

⁵³ *Annual Report of the Attorney-General*, 1920, p. 180; also *Commercial and Financial Chronicle*, CIX (September 20, 1919), pp. 1129-30.

⁵⁴ Howard Figg, "Present Day Prices", *The Annals of the American Academy of Political and Social Science*, LXXXIX, (May 1920), p. 20.

⁵⁵ *New York Times*, December 23, 1919, p. 4.

⁵⁶ *Annual Report of the Attorney-General*, 1920, pp. 180-2.

⁵⁷ *Commercial and Financial Chronicle*, CIX (September 20, 1919), p. 1128-9; *New York Times*, August 27, 1919, p. 19.

The War Department made its contribution to a solution to the problem by setting up a chain of retail stores throughout the country to dispose of government surpluses at four-fifths the going market price, but its sales were too small to be effective in stemming the price rise.⁵⁸ President Wilson also called two Industrial Conferences primarily to work out a solution to the labor problem but almost equally as much to deal with the high cost of living. But the first conference ended in bitter controversy, and the results of the second were studiously ignored by Congress.

V

From the foregoing analysis of the problem it is evident that there was no reason why much success should have been expected from the government's attack on the high cost of living. In the first place, even scientific remedies did not promise immediate and drastic reduction of prices, except through depression and price deflation. Secondly, the proposed attack of the government did not proceed entirely along the lines of a scientific approach. Thirdly, with the exception of an amendment of the Food Control Act, Congress refused to give the administration any power to proceed against the problem. Consequently the "smear" campaign which the public and press carried on against the "profiteer" business man on the one hand and the "un-American" labor union on the other hand, although permitting an outlet for pent-up emotions and possibly bringing some temporary price relief through elimination of some of the more flagrant cases of profiteering, did not provide a really constructive plan to deal with the problem.

Following the first public outcry against the high cost of living, prices took a momentary dip in their upward ascent. In September the wholesale price index dropped 2.2 per cent from the high of August 1919 and the October index showed prices still lower than August 15, but in November they jumped back above the August figure and continued to advance rapidly to their peak in May 1920, almost 16 per cent above the August level. Interestingly enough, the sharpest drop in the September and October price recession came in the farm products group with a 6.2 per cent decline from the August figure, and the least drop .6 of one per cent came in finished products,⁵⁹ indicating one or both of two things: (1) either there was greater profiteering in farm products, which was highly doubtful, or (2) business corporations, combinations, etc., having concerted economic power at their disposal were better able to hold their position against stampeding in the face of public inquiry and condemnation of their price policies.

In the early days of the government campaign against the high cost of living Attorney-General Palmer in an overly optimistic mood predicted before the Senate Agricultural Committee that if penalties of \$5,000 fine and/or two years imprisonment were made effective by amendment to the Food Control Act, "the backbone of this profiteering" could be broken in sixty days.⁶⁰ But even assum-

⁵⁸ Benedict Crowell & Robert Wilson, *Demobilization*, (Yale Press, 1921) pp. 283-4.

⁵⁹ Bureau of Labor Statistics Farm Products Group Index and Finished Products Wholesale Price Index, *Standard Trade and Securities*, (April 26, 1938), Section D, pp. 7-8.

⁶⁰ *New York Times*, August 15, 1919, p. 1.

ing that the backbone of profiteering could have been broken in six months, it still would not have fundamentally affected the level of prices.

The net result of the "witch hunt" campaign against high cost of living offenders was therefore less than nothing as judged by the course of future events, as every part of the economic chain from retailers to wholesalers to manufacturers to laborers to consumers all attempted to "pass the buck" to each other.⁶¹ In short, "witch hunting" and "buck passing" were not very constructive measures to cope with a difficult economic problem.

⁶¹ *New York Times*, August 17, 1919, Section 2, p. 7; August 31, 1919, Section 2, p. 7.

NOTE ON WAGES AND LABOR COSTS

RICHARD A. LESTER

Duke University

On the basis of data for the period from 1919 through 1941, certain tentative conclusions can be drawn regarding relationships between average hourly earnings, output per man hour, and unit labor costs in manufacturing. The results of this limited study are of significance for wage theory and for the formulation of public policy regarding increases in wage rates or in average hourly earnings both during and after the war.

The distinctions between wage rates, average hourly earnings, and labor costs must be borne in mind.¹ Such factors as changes in labor productivity, in the hours of work, in the distribution of jobs, etc., cause these three items to diverge. It has been estimated, for example, that average hourly earnings rose twice as fast as wage rates in durable-goods manufacturing between August, 1939, and January, 1943.² Between 1919 and 1941, labor costs per unit of output in manufacturing apparently declined 39 per cent despite an increase of perhaps 60 per cent in average hourly earnings.³ Changes in output per man hour make unit labor costs flexible despite rigidities in wage rates or average hourly earnings.⁴

The best available data on productivity and unit labor cost in manufacturing are the indexes for some 50-odd industries published by the U. S. Bureau of Labor Statistics. They are based largely upon the Biennial Census of Manufactures and B.L.S. data, and represent extensions and revisions of the data originally developed by the National Research Project on Re-employment Opportunities and Recent Changes in Industrial Techniques.⁵ Table I presents a

¹ It is surprising how frequently these three items are confused with each other. The main conclusions of a recent publication by the Brookings Institution are completely vitiated because average hourly earnings are used to measure changes in "wage rates" and in "wage costs" during World Wars I and II, with the result that the authors arrive at conclusions exactly opposite from those that would have followed had they actually used data for wage rates and unit labor costs in manufacturing. See Harold G. Moulton and Karl Schlotterbeck, *Collapse or Boom at the End of the War?* The Brookings Institution, 1942, pp. 33-35.

² See Richard A. Lester, "Effects of the War on Wages and Hours," *American Economic Review*, vol. XXXIII, Supplement, March, 1943, p. 218.

³ Based on indexes in *Productivity and Unit Labor Cost in Selected Manufacturing Industries, 1919-1940*, U. S. Bureau of Labor Statistics, February, 1942, p. 1; *Productivity and Unit Labor Cost in Selected Manufacturing Industries: 1941 (Preliminary)*, U. S. Bureau of Labor Statistics, March 2, 1942, p. 2, and *Productivity and Unit Labor Cost in Selected Manufacturing Industries: 1939-1942*, U. S. Bureau of Labor Statistics, March, 1943.

⁴ For further discussion of this point, see Irving H. Siegel, "Hourly Earnings and Unit Labor Cost in Manufacturing," *Journal of the American Statistical Association*, vol. 35, September, 1940, pp. 455-60.

⁵ See Harry Magdoff, Irving H. Siegel, and Milton B. Davis, *Production, Employment, and Productivity in 59 Manufacturing Industries, 1919-1936*, Work Projects Administration, National Research Project, Parts One and Two. Philadelphia, May, 1939.

summary for manufacturing as a whole, indicating the biennial changes in various labor items from 1919 to 1941.⁶

There does not appear to be a close association between changes in total production and in output per man hour. Some relationship seems to be present for the years between 1925 and 1935, but even during that decade the correlation would not be high. Study of percentage changes in the indexes for individual industries indicates that the correspondence between changes in total production and in output per man hour is most marked for the heavy industries with large overhead, like iron and steel, agricultural machinery, motor vehicles, and

TABLE I
BIENNIAL CHANGES IN PRODUCTION, LABOR COST, AND HOURLY EARNINGS FOR ALL
MANUFACTURING, 1919-1941

BIENNIUM ENDING	PERCENTAGE CHANGE DURING BIENNIUM IN			
	Production	Output per Man Hour	Unit Labor Cost	Average Hourly Earnings
1921	-12.3%	+20.3%	-12.0%	+5.9%
1923	+43.7	+8.7	-5.2	+3.0
1925	+6.5	+13.3	-7.8	+4.6
1927	+6.4	+6.6	-4.8	+1.4
1929	+14.8	+9.1	-6.0	+2.5
1931	-28.0	+7.3	-14.9	-8.6
1933	-12.8	+2.3	-15.3	-13.3
1935	+31.9	+9.7	+22.1	+23.2
1937	+24.8	-0.7	+10.9	+11.0
1939	-0.8	+10.7	-9.4	+0.3
1941	+48.4	+7.8	+8.7	+24.4
Biennial average...	+11.15	+8.65	-3.06	+4.95
Average biennial variation.....	20.95	8.77	6.85	8.93

Source: Calculated from Table, p. 1, *Productivity and Unit Labor Cost in Selected Manufacturing Industries, 1919-1940*, and *Productivity and Unit Labor Cost in Selected Manufacturing Industries: 1941*. An index of average hourly earnings was calculated from the indexes of payrolls and man hours.

non-ferrous metals, although the indexes even for these industries move in opposite directions during the bienniums ending in 1921 and 1939. Generally speaking, increases in output per man hour tend to be smallest during periods of downswing in the business cycle, although there are numerous exceptions to that generalization.

Examination and comparison of the changes in output per man hour, average hourly earnings, and unit labor cost are very interesting and instructive. Output per man hour varied about as much (an average of 8.77 per cent a biennium) as did average hourly earnings (8.93 per cent a biennium) and, therefore, was as

⁶ For the limitations and methods of computation of the indexes upon which Table I rests, see the sources mentioned in the table.

important a factor as average hourly earnings in influencing and determining unit labor costs. Despite an average increase of 5 per cent a biennium in average hourly earnings, unit labor cost showed an average decline of 3 per cent a biennium because output per man hour increased, on the average, over 8 per cent a biennium. These figures indicate that labor has tended to receive about three-fifths of the increase in productivity per man hour in the form of increased wages. The largest increase in output per man hour occurred from 1919 to 1921, after the last war, when a 6 per cent increase in average hourly earnings was accompanied by a 12-per-cent decrease in labor costs per unit of output. Unit labor costs rose only during the bienniums ending in 1935, 1937, and 1941, when average hourly earnings rose by more than 10 per cent.

It is also interesting to observe in Table I that the bienniums of greatest increase in output per man hour (those ending in 1921, 1925, and 1939) were not those of greatest increase in average hourly earnings. When output per man hour for all manufacturing rose by 10.7, 13.3, and 20.3 per cent, average hourly earnings rose only 0.3, 4.6, and 5.9 per cent respectively, or much less than the average biennial change in average hourly earnings. In the three bienniums ending in 1931, 1933, and 1937, output per man hour and average hourly earnings moved in opposite directions.

Study of indexes for the individual industries indicates that the over-all data in Table I are fairly representative of the various industries. Percentagewise, the biennial changes in output per man hour were much greater than those in average hourly earnings for such industries as agricultural implements, motor vehicles, steel, non-ferrous metals, chemicals, and petroleum. In those industries, increases in output per man hour apparently have been more important in causing changes in unit labor costs than have variations in average hourly earnings.

Unit labor costs rose in the bienniums ending 1935, 1937, and 1941 in most industries because average hourly earnings increased more than 10 per cent during the biennium. Whenever average hourly earnings in any industry increased no more than 10 per cent a biennium, labor costs per unit did not rise. In a few cases, output per man hour rose so much that unit labor costs did not rise despite a biennial increase of more than 10 per cent in average hourly earnings. That was true, for example, of the rubber industry from 1919 to 1921 when a 42-per-cent increase in output per man hour more than offset a 14-per-cent increase in average hourly earnings so that unit labor costs fell 20 per cent; or of the lumber industry from 1937 to 1939, when a 21-per-cent increase in output per man hour more than offset a 10.6-per-cent increase in average hourly earnings so that unit labor costs fell 9 per cent. In the agricultural implement industry, changes in total production influence, to a marked degree, changes in output per man hour, and changes in output per man hour have been about three times as great as changes in average hourly earnings. Consequently, in that industry a 35-per-cent increase in average hourly earnings during the biennium ending in 1939 was more than offset by a 38-per-cent increase in output per man hour so that unit labor costs fell two per cent.

From this limited study, certain tentative conclusions can be drawn:

1. Changes in output per man hour have been as important as changes in hourly earnings in determining unit labor costs in manufacturing. Conclusions regarding the rigidity or magnitude of labor costs must be based on wages per unit of output, rather than on wage rates or average hourly earnings.

2. There has not been a close correspondence biennially between changes in output per man hour and in average hourly earnings either for manufacturing as a whole or four individual industries. It has been generally true that, during bienniums of large increase in output per man hour, increases in average hourly earnings have been relatively small.

3. The normal expectancy has been for average hourly earnings to increase three or four per cent a year, along with a decrease of one and a half per cent in unit labor costs. Of course, this expectancy has frequently been upset during particular bienniums by marked changes in the price level.

4. For industry as a whole, hourly earnings could have increased up to 5 per cent a year, on the average, without increasing unit labor costs. When productivity per man hour increases more rapidly than the average, average hourly earnings can increase correspondingly without higher product prices.

5. In the past, workers have tended to receive about three-fifths of the increases in productivity per man hour in the form of higher average hourly earnings. Stabilization of average hourly earnings would give the benefits of increases in productivity to other groups and labor would benefit only indirectly.

VOLUNTARY SAVINGS AND CONSUMER BEHAVIOR

CHARLES T. TAYLOR

Federal Reserve Bank of Atlanta

To the majority of Americans, a dollar has only one function. It is to be used immediately in the purchase of food, clothing, or shelter. Few Americans have ever had difficulties in finding an outlet for their incomes. Most Americans live from one pay day to another and are seldom able to save much surplus above living expenses. The end of a given year finds few of them with balances in the bank or money in their pockets.

Two facts account for this condition. There is first the fact that the majority of persons who receive incomes in the United States receive comparatively small incomes. A second reason is that "necessary living expenses" are based upon psychological reactions as well as upon physical requirements.

The first fact is too well known to require extensive comment. The only really extensive survey made of the entire nation on the distribution of income was made by the co-operation of various governmental agencies for the year 1935-36. In general, according to this study of consumer incomes, one-third of all American families and individual consumers had annual incomes of less than \$780, one-half less than \$1,070 and two-thirds less than \$1,450. About nine-tenths received less than \$2,500. About two per cent of all consumer units received incomes of \$5,000 or over, and less than one per cent received \$10,000 and over.¹

The war has increased the incomes of many. It has not, despite isolated cases, raised the incomes of the majority out of what is considered the lower income groups. Total manufacturing wages have risen tremendously. To many individuals it has meant an income where no income has existed before. To many it has meant a job where there was no job before. It has not meant an increase in the incomes of the majority to the level of income enjoyed by the relative few before the war.

The wage and salary pie has become bigger, but at the same time the number of persons to be served pie have become more numerous. The elite of the non-agricultural workers, so far as wage payments are concerned, are the manufacturing wage earners. Assuming a full 52 weeks of work, the average manufacturing employee in June 1941 was receiving \$1,385 a year. By April 1943 his estimated earnings had risen to \$2,448. While this rise has been substantial, it has not placed the manufacturing wage earners as a group in a class where any considerable portion of their incomes would normally be saved. Furthermore, many manufacturing employees are receiving less than this average. Furthermore, manufacturing employees constitute only about 40 per cent of all non-agricultural workers in the United States. There are, for example, bituminous coal miners whose annual earnings on a 52-week basis, which considerably exag-

¹ National Resources Committee, *Consumer Incomes in the United States* (Washington, 1938) pp. 6-9.

gerates the real earnings, rose from \$831 in January 1941 to \$2,208 in April 1943. Retail trade employees increased their annual earnings from \$1,120 to only \$1,260 and there are other groups of employees in much the same position.

Agricultural workers in April 1943 totaled 9.6 million of the estimated employment of 51.2 million persons. Wages of agricultural workers have risen as well as those of nonagricultural workers, but in April the average yearly wage on the basis of a 12-month working period was comparatively low—\$807 without board and \$606 with board. In short, although many workers have enjoyed substantial increases in income as a result of the war activity, the increases in income of the majority of workers have not raised their incomes to levels at which in normal times substantial proportions of their incomes would be saved.

The radio, the press, and other media have been used to urge each citizen to "figure it out for yourself." Total your necessary living expenses, he is told; subtract them from your income. The rest should be spent for war bonds. Under this process persons with \$1,000 or \$3,000 incomes could with equal justification "figure it out for themselves" and arrive at an amount to be spent for war bonds very nearly approaching zero. Necessary living expenses are almost as elastic as income.

The same statistical study which showed the distribution of income in 1935-36 also showed that not until incomes of consumer units reached \$1,500 was any appreciable portion saved. Not until incomes reached \$2,500 was the classical 10 per cent of income saved. The definition of savings was the broadest possible and included purchases of durable consumer goods and insurance premiums—not liquid savings and investments alone.² The corollary is that the greater part of the total of individual savings consisted of savings made by individuals with higher incomes. For most persons "necessary" living expenses expand as income increases.

This fundamental fact is not surprising. Approximately two billion dollars were spent each year before the war upon an educational campaign to convince consumers that the thing to do with their dollars was to spend them. That was advertising's mission. No curtailment in the amount of advertising has been apparent during the war. Advertisers have switched their appeals to a patriotic basis, but the urge to buy is still there. For example, we may be told that the next best investment to a war bond is a suit of clothes, but we know all the time that the advertiser doesn't want us to lose our desire for a suit.

The effect of an educational campaign of many years standing and costing over two billion dollars a year is not to be overcome suddenly, despite war conditions. Especially is this true when the consumer buying behavior was already strongly ingrained. Those who have been unhappy for years because they were unable for lack of purchasing power to have the things they were told dozens of times a day they should have are going to have them now if new purchasing power makes it possible. Mounting retail sales are evidence of that. More fundamental still: persons who have never had decent food, medical care,

² National Resources Committee, *op. cit.*, pp. 19-22.

clothes for the children—and there were many in the United States—are going to try to get them if they have increased incomes.

Before those with higher incomes condemn the improvidence of the poor, they should recall that the fact that on an average a man with \$10,000 saves 30 per cent of his income is an accident of income rather than a token of provident living. His living expenses are still seven times as high as those of the man with a \$1,000 income who saves nothing. Until his living expenses are reduced to the poor man's level, he is in no position to assume an attitude of self-righteousness. His "necessary" expenses are higher because his income is higher.

Whatever the moral issues involved, a dollar of income received by those with lower incomes is more likely to be spent than a dollar of income received by those with higher incomes. An increase in income by the lower third of income receivers will in all likelihood be spent. The same increase in income by the upper third of income receivers will in all likelihood be at least partially saved. The more diffused the increase in the national income, the greater will be the pressure to spend that increase.

In times of peace an increase in national income brings with it increased goods to meet increased demands. Indeed, some would say that a wide diffusion of the increase in purchasing power would more nearly assure a continuance of the increased national income than if the increase were concentrated in the hands of a few and a larger proportion were saved. War, on the other hand, brings with it an increased national income but also fewer goods to buy in proportion to the income. The difference between the increased national income and the amount of goods and services available is what is known as the inflationary gap.

To avoid closing the gap through rising prices, demands of consumers must be reduced to an amount equal to the value of the goods and services available. Increased taxation absorbs part of the difference. The Treasury is trying to mop up the remainder by the voluntary purchase of war bonds by individuals. The purchase of such bonds is only another form of savings.

If increases in income during the war had affected only persons having incomes of \$20,000 or above, the problem would have been much easier of solution. On the basis of the 1935-36 behavior pattern, about 50 cents out of each dollar of increased income would have been saved anyway. Appeals to patriotism and lack of certain types of luxury goods might well have absorbed the remainder. But the increases in income did not take place in this fashion.

By the very nature of the war program bringing with it a tremendous increase in industrial employment, the increase in national income has been widely diffused. Farmers, a low-income group on the whole, have also shared heavily in the increase. To the fundamental fact that for most people the sole purpose of having a dollar is to spend it, is added the fact that the increased dollars have been put in the hands of those most likely to spend them.

Evidence of these facts may be found by an analysis of Department of Commerce estimates of income payments by states for 1941 and 1942 and the sales of war bonds by states.

From 1941 to 1942 total national income payments increased 22,129 million

dollars. The increase did not take place evenly from state to state. In fact, those states with low per capita incomes received a more than proportionate share of the total income increase as shown in Table 1. In this table each state's share in the total 1941 income was computed, as well as each state's share in the total increase in income from 1941 to 1942. The resulting percentages were then arranged in the order of the per capita incomes of the states in 1941 from the lowest to the highest and the percentages accumulated.

From Table 1 it is apparent that increases in income from 1941 to 1942 were concentrated to a considerable extent in the low income states. Thus, while the 13 states having per capita incomes of less than \$600 accounted for only 22 per cent of total income payments in 1941, increases in per capita income in those states made up 32 per cent of the increase in total income. Since it safely may be assumed that the proportion of individuals with lower incomes is greater in states with low per capita incomes, there is here conclusive evidence that

TABLE 1
DISTRIBUTION OF PER CAPITA INCOME BY STATES, 1941-42

STATES WITH PER CAPITA INCOMES IN 1941	PER CENT OF TOTAL INCOME IN 1941	PER CENT OF TOTAL INCREASE IN INCOME 1941-42
Below \$300	.66	1.31
" 400	7.14	11.18
" 500	12.21	17.11
" 600	21.68	31.91
" 700	33.91	44.13
" 800	54.39	61.98
" 900	65.73	73.05
" 1,000	92.45	92.59

Source: Income data compiled from Daniel Creamer and Charles F. Schwartz, "State Income Payments in 1942," *Survey of Current Business*, June 1943, pp. 10-22.

increases in incomes from 1941 to 1942 were diffused to a great extent among the lower-income groups.

If increases in income were centered in low-income states and thus among low-income individuals, how did this affect the sale of war bonds? In Table 2 a comparison has been made between income payments by states in 1942 and purchases of series E, F, and G bonds.

The data in Table 2 show that low-income states accounted for a smaller proportion of the total sales of war bonds in 1942 than would be expected on the basis of the proportion of total income payments received in those states. If the data were plotted, the resulting curve would be opposite to that shown by the data in Table 1. While, according to Table 1, increases in income were concentrated in the low-income states, Table 2 shows that sales of war bonds were concentrated in the high income states.

Presumably the increased income not used to purchase war bonds was used

to purchase goods and services. Here is evidence that the war has not changed the principle that a dollar received by an individual with a low income is more likely to be spent than one received by an individual with a high income. True, not all purchases of government securities by individuals are made by buying series E, F, and G bonds. Other types of securities, however, are purchased by individuals with high incomes. If it were possible to determine such purchases by states, the concentration of purchases in high income states would be still greater.

The difficult task of closing the inflationary gap, therefore, has been made more difficult not only by the greater propensity to consume among lower-income groups, but by the fact that it is among those income groups that much of the increase in income has taken place. Further evidence is provided by the fact,

TABLE 2
DISTRIBUTION OF SALES OF WAR BONDS BY STATES, 1942

STATES WITH PER CAPITA INCOMES IN 1942	PER CENT OF TOTAL INCOME IN 1941	PER CENT OF TOTAL SALES OF WAR BONDS IN 1942
Below \$500	6.8	4.5
" 600	12.9	9.6
" 700	19.9	15.8
" 800	30.0	26.0
" 900	44.6	41.0
" 1,000	62.1	58.7
" 1,100	83.0	83.7
" 1,200	94.0	93.6
" 1,300	96.0	95.9
" 1,400	100.0	100.0

Sources: Income data, same as Table 1. Data on purchases of war bonds are for sales of series E, F, and G bonds for the calendar year 1942. They were derived from Tables 3 and 4, *Bulletin of the Treasury Department*, February 1943.

as shown below, that smaller proportions of increases in incomes have been used in states with low incomes to purchase war bonds than in high income states.

The comparison was made by first computing the per capita sales of war bonds by states for 1942 and dividing per capita sales by per capita increases in income from 1941 to 1942. The resulting ratios represent the proportion of the increase in per capita incomes devoted to the purchase of war bonds. Although there were exceptions to the general tendency, for the nation as a whole, those states with higher per capita incomes devoted a greater proportion of the increases in per capita income to the purchase of war bonds than did those states with low per capita incomes. Mathematically stated, there was a correlation of $+ .66 \pm .08$.

By computing a line of regression it is possible to estimate the proportion of the increase in per capita income from 1941 to 1942 that would be expected to

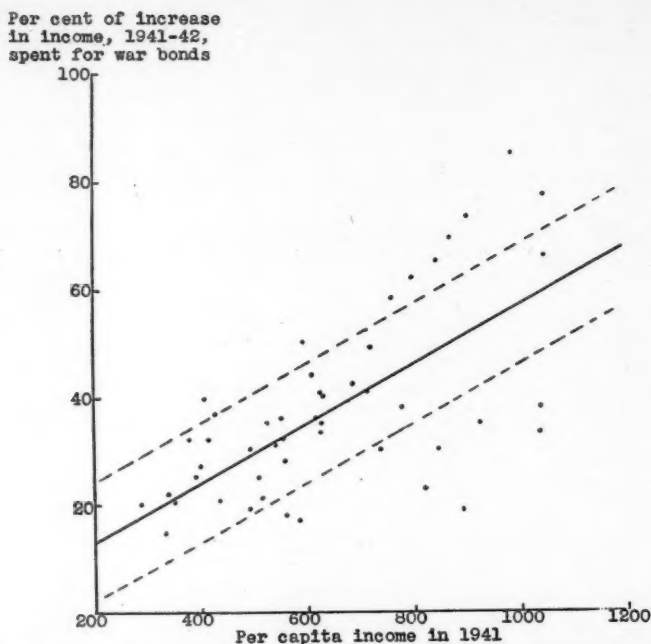


CHART I. RELATION BETWEEN PER CAPITA INCOME IN 1941 AND PER CENT OF INCREASE IN PER CAPITA INCOME, 1941-42, SPENT FOR E, F, AND G BONDS

TABLE 3

PROPORTION OF INCREASE IN PER CAPITA INCOME 1941-42 DEVOTED TO THE PURCHASE OF WAR BONDS AT VARIOUS LEVELS OF PER CAPITA INCOME IN 1941 BY STATES

PER CAPITA STATE INCOME IN 1941	PER CENT OF INCREASE IN PER CAPITA INCOME, 1941-42, SPENT FOR WAR BONDS
\$400	24
500	30
600	35
700	41
800	46
900	51
1,000	57

go to the purchase of war bonds on the basis of purchases in 1942.³ This line of estimate together with the data are shown on the scatter diagram on Chart 1. Estimates at various levels of per capita income are shown in Table 3.

³ The line of estimate is as follows: $Y = 3.1 + .0534X$
where

Out of each dollar increase in per capita income in a state with a per capita income of \$400 in 1941, 24 cents would be expected to go for the purchase of war bonds. In states with per capita incomes of \$1,000, each dollar increase in income would result in 57 cents going for the purchase of war bonds. Stated in another way, there were about 24 chances out of 100 that a dollar increase in the \$400 income state would be used in the purchase of war bonds, while the chances were about 57 out of 100, more than two times as great, that a dollar increase in the \$1,000 income state would be used thus.

Presumably, if increases in income from 1941 to 1942 had taken place primarily in the higher-income states, inflationary pressure upon the prices of consumer goods and services would have been considerably less, if we assume that increased income not used to buy war bonds was spent. A dollar increase in per capita income in the state with a \$400 income rather than in a state with the \$1,000 income meant a loss to the Treasury of 33 cents toward the purchase of series E, F, and G bonds. To give an exaggerated example, if the total increase in national income payments had taken place in states with incomes of \$1,000 or over in 1941 instead of being dispersed over the rest of the country, sales of war bonds might have amounted to 12.6 billion dollars instead of the 8.8 billion dollars in sales actually made.⁴

On the basis of the foregoing evidence, any plan to absorb completely increased income payments by the voluntary purchases of war bonds is bound to fail. Appeals to patriotism may stimulate savings, but they do not alter the fundamental laws of consumption. When, in addition, increases in income go more than proportionately to lower income groups, the problem is made increasingly difficult. Consumers with comparatively low incomes may not be able to get the goods they want with the increases in income, but they will certainly try.

Y = Estimated per cent of increase in per capita income devoted to the purchase of series E, F, and G bonds.

X = Per capita income in 1941.

The standard error of estimate is 11.00.

Note: Because of the extreme divergence of data for New Hampshire from the general trend, it was omitted from the calculations.

⁴ Total sales in 48 states and District of Columbia for calendar year 1942 and excluding territorial sales.

BOOK REVIEWS

The Dynamics of Business. By Norman J. Silberling. New York: McGraw Hill Book Company, 1943. Pp. x, 759. \$5.00.

In this impressive volume the late Dr. Silberling measures the movements of American business since 1700, develops theories of causation, and draws conclusions concerning the proper relationship between government and business.

The movements with which he is concerned are secular trend, intermediate trend, and cyclical movements. A notable achievement is his Business Index, running from 1700 to date. In the early years it was necessary to rely upon population data and the physical volume of imports, and it was not until 1871 that the physical volume of production, as such, could be included. After combining the data an intermediate trend was obtained by taking the average of a 15-year moving average and a 21-year moving average. A secular trend was then obtained by fitting a third-degree curve to the logarithms of the intermediate trend. This trend shows a rate of increase that declines from 3.8 per cent in the early years to 3.6 in the later years. Finally, cyclical movements were superimposed upon the intermediate trend using, after 1855, whatever cyclical data seemed to be most satisfactory.

Little similarity is found between the timing of Silberling's intermediate trend and Kondratieff's long waves. The reader is entitled to skepticism on this point, however, because of the scantiness of the data before 1855, and because of the technique used to measure the intermediate trend. The reviewer is convinced that troughs corresponding to Kondratieff's long cycles could have been obtained in the periods 1840-1845 and 1890-1895 by using a moving average of different length. It is Silberling's conclusion that Kondratieff's long waves refer to price data or to value series, whereas the intermediate trend in production data is not related to price changes. Introduction of new ways of applying power to production and transportation appears to be a major factor affecting the intermediate trend.

Cyclical movements are accounted for mainly by fluctuations in residential construction and in transportation equipment. For peace-time periods a high coefficient of multiple correlation is found between the business index and transportation equipment and construction indexes. Residential construction is associated with general population increments brought about by waves of immigration, and with increments in particular localities resulting from internal migrations.

Unsound financing has tended to amplify the initial causes of instability. Thus, heavy bonded indebtedness of railroads has made for tremendous gyrations in profits and large fluctuations in purchases of equipment. The financing of residential construction by short-term loans without amortization has facilitated periods of over-building, and led to subsequent mortgage foreclosures. When the home owner is in danger of losing his home, he cuts down on purchases

of non-durable goods, and the effect is transmitted to curtailment in business expenditures for producers' goods.

Dr. Silberling's views on governmental policy are distinctly of a conservative nature, but are presented with vigor and clarity. They constitute an excellent defense of moderately regulated capitalism, and a strong attack on Keynesian economic theory and much of the New Deal philosophy. The Keynesians confuse cycle with trend, and the New Dealers confuse equalization of income over time with equalization of income among persons. Reforms embodying these confusions will lead (are designed to lead?) to governmental control of job-creating capital and permanent economic regimentation.

More specifically, the theory that the slackening of population growth and of industrial innovations necessitate a vast program of governmental expenditure is without foundation. So also is the theory that corporations over-save and should be compelled to pay out currently the bulk of their earnings. On the contrary, corporations should save systematically and reduce their bonded indebtedness, keeping their financial structure such that they can finance improvements by the sale of common stock. Tax policy should be such as to encourage risk-taking, reduction of corporate debt, and acquisition of common stock by investors, including institutional investors. Retirement of government debt would help also. On the other hand, Silberling approves most of the New Deal banking reforms, especially those providing for amortization of farm and residential mortgages. He is not impressed with the notion that oligopoly leads to inflexible prices and accentuation of depressions. Rather, he believes that flexible industrial prices would lead to insolvency and chaos. He therefore regrets the abandonment for legal reasons of the N. R. A. experiment.

This volume not only embodies an enormous amount of statistical effort, and a well integrated theory founded in large part on the statistical findings, but careful attention has been given to the literary style. The reader is not annoyed by meticulous descriptions of statistical procedure in the body of the text, though these will be found in the appendix. A possible criticism is that the numerical values of indexes compiled by the writer are not given. Neither are coefficients of correlation or other statistical measures. The text is profusely illustrated with 76 charts showing relationships among the various indexes, and the reader is left to make his own estimates as to the degree of association between various pairs of time series. The tone of the writing is at times perhaps too contentious, but it indicates the strength of the writer's convictions and the depth of his feelings, and at the same time makes the book more interesting to read.

University of North Carolina

DUDLEY J. COWDEN

Monetary and Banking Theories of Jacksonian Democracy. By Sister M. Grace Madeleine. Philadelphia: The Dolphin Press, 1943. Pp. 163. \$2.50.

In this book the author has set forth the monetary and banking theories prevalent in the United States from the beginning of the republic down to 1860. Some of these theories were: (1) that there is a natural quantity of money necessary to carry on the trade of a country; (2) that this quantity can be deter-

mined only by experimentation; (3) that if no paper money is issued specie will flow in until "the channels of trade are full"; (4) that if paper money is issued, specie will be released for making purchases abroad; (5) that there can be no over-issue of paper money so long as it is redeemable in specie, for when the channels of trade are filled, the paper will be presented for redemption, furnishing a gauge of the natural amount of money needed. There was a theory that paper money should be issued by banks under private control rather than by the government, for banks could be required by law to redeem their issues while political pressure leads governments to over-issue with ultimate depreciation and repudiation.

In view of these theories Hamilton and his followers thought that a national bank under private control would be of great benefit to the country, since it would furnish a sound national currency for the use of business and the government and would be able to assist the government by loans and by acting as its fiscal agent.

On the other hand, the opponents of a national bank believed that such a bank was unconstitutional or that it would exercise too much political and economic power over the states. They favored a metallic currency or a paper currency issued by the government. Among those who held these theories were Thomas Jefferson, James Madison, Andrew Jackson, and their followers. Others opposed establishing any banks, on the theory that they conferred special privileges upon a few at the expense of the masses.

Andrew Jackson seems to have shifted his point of view in regard to banks from time to time. He believed a national bank was unconstitutional, but, after vetoing the renewal of the charter of the Second Bank of the United States, he advocated the establishment of a national bank that would conform to his ideas. In his veto message he seems to have thought banks undemocratic, for he said, "Distinctions in society will always exist—but when the law undertakes to add to these natural advantages, artificial distinctions—to make the rich richer and the potent more powerful, the humble members of society have a right to complain of the injustice of government."

In addition to analyzing the banking theories of the early period of American banking, the author reviews the history of the First and Second Banks of the United States, the rise and development of the state banks, the establishment of the Sub-treasury, and the inauguration of the Suffolk System, the Safety Fund System, and the system of free banking. The book makes a worthy contribution to banking literature.

Washington and Lee University

B. B. HOLDER

Monetary Reform Movements: A Survey of Recent Plans and Panaceas. By Joseph E. Reeve. Washington, D. C.: American Council on Public Affairs, 1943. Pp. xiv, 404. \$3.75.

Few authors ever packed into 389 pages more useful knowledge or shrewd discernment concerning the multiplicity of suggested monetary reforms and panaceas of a given period than does Joseph E. Reeve in this volume. His range

of information is unusually vast, combining a thorough familiarity with printed sources with a startling knowledge of the less accessible facts about monetary reformers and their reforms. With this goes a style of presentation cramped neither by the fear of transcending the bounds of "objectivity" nor by the academician's usual reluctance to pronounce clear-cut judgment. Moreover, the author has presented his subject in a treatise which reads well and, even more important, in one which rereads well.

The purpose of the study is to "present a comprehensive treatment of the monetary reform movements and ideas which appeared in the United States during the ten years between the Wall Street crash and the second World War." Although the study is primarily economic, it is of value to the student of political movements as well as to the historian. Moreover, the economic planner of the post-war world would do well to examine its pages because another period of crisis will again find the monetary reformer in the forefront peddling his wares.

As Mr. Reeve states, monetary reform is a depression industry. During the thirties, every town, every street corner, every country store, every part of the country had at least one self-styled "expert" on the money question who believed that he alone had discovered the one and only way out of the economic dilemma. Since this is true, it was necessary for the author to limit the field and hence "no one is considered a monetary reformer unless (1) he explicitly imputes to the monetary, banking or fiscal system an important, if not unique, role in causing fluctuations of the business cycle, and (2) he proposes positive measures designed directly or indirectly to control the volume or velocity of the circulating medium toward the ultimate goal of ending depressions." Excluding the "sound money" advocates and one or two minor groups from consideration as monetary reformers may invite criticism from some, but the reviewer thinks that the author has strengthened the study by his specific delimitation.

The study can be divided quite naturally into four sections. In the first section, the history of the monetary reform movements of the 1929-39 period is considered. The second section concerns itself with diagnosing the views of the three eclectic (the author's favorite word) leaders, Father Charles E. Coughlin, Senator Elmer Thomas and Professor Irving Fisher who "were among the most effective in arousing popular interest and in securing political action."

It is with the third section that the author makes his most significant contribution. Here he analyzes five major types of monetary proposals. These are legal tender currency expansion, fiscal inflation, silver schemes, alteration of the traditional gold standard, and employment of the banking system for monetary expansion. In addition, he considers certain miscellaneous monetary expansion proposals. In this section Dr. Reeve has accomplished what he set out to do. In brief compass, he has succeeded in bringing out the most important weaknesses and strong points of each type of plan. By searching the economic literature one can find most of the criticisms brought out here, but the book makes its contribution by collecting and winnowing these criticisms, by showing the relationships among the various types of remedies, and by maintaining

throughout an impartial and analytical attitude. The last section of the study is a summary of conclusions.

Usually a reviewer does not think he has been justified in his task unless he points out some weaknesses of the volume reviewed or challenges some statement made. Some few specific criticisms might be made of this volume but they would be largely of a secondary nature and hence of little importance. Therefore let it suffice to say that Dr. Reeve has left us greatly in his debt by writing this history, not of books or battles, but of ideas and by his scholarly, well documented attempt to check the answers given by different groups relating to the number-one economic problem of the 1929-39 decade.

Clemson College

JAMES E. WARD

The New Philosophy of Public Debt. By Harold G. Moulton. Washington: The Brookings Institution. Pp. vi, 93.

With the national debt approaching 150 billion dollars and the end to its increase nowhere in sight, the present monograph provides a timely and lucid examination of the basic issues involved in two opposing conceptions of the relationships between an internally held national debt and the economic process. Depressed conditions in the thirties produced a school of thought which not only urged an unbalanced budget as a necessary compensatory factor for reduced private spending during the depression, but also contended that in an alleged mature economy private savings tended to exceed investment and huge corporate savings, partly concealed in reserves, freed corporate enterprise from continuous resort to the pool of individual savings, with the result that continued unbalance in the budget was an essential condition to reasonably full employment.

Dr. Moulton analyzes the underlying assumptions of this school of thought and concludes that they are either erroneous or unrealistic. He vigorously condemns, and rightly so, the view that a huge public debt will exert no restrictionist consequences because the costs of debt service represent an equal amount of income to the community. It is true that the amount Peter surrenders in taxes to service the debt, Paul receives in interest income, but it is obvious nonsense to argue that the spirit of enterprise of either party is unaffected by this process of income distribution. The author therefore defends the orthodox view that indefinitely prolonged unbalance in the budget will lead to unbearable taxation, a decreased rate of private investment, and ultimate resort to inflation as the avenue of financial escape.

While Dr. Moulton has for expository purposes drawn the position of the spending school in sharp and bold outlines, with delicate shadings sometimes omitted, he has given us an excellent survey of the major issues. The case for the orthodox position might have been somewhat better buttressed if the author had emphasized the fact that the usual remedies for unproductive private debt through the processes of receivership and reorganization are not available for the national debt, and hence resort to inflation as the escape device becomes inevitable. The effect of the debt and consequent tax structure on private investment might have been elaborated despite the fact that these issues are

more adequately treated in the author's earlier study of "*Capital Expansion, Employment and Economic Stability*."

University of North Carolina

JOHN B. WOOSLEY

Economic Equilibrium, Employment and Natural Resources. By L. R. Nienstaedt. Bloomington, Ind., The Principia Press, Inc. Pp. 412. \$4.00.

The author of this work is a metallurgical engineer, and his professional background without doubt accounts for the physiocratic and technocratic bias of his economic philosophy. The work undertakes to develop a theory of relationships between certain economic aggregates in a competitive economy. These relationships are stated in terms of physical units rather than in money values. Moreover, the underlying theory itself avoids price considerations almost entirely. In effect the author offers a physico-economic theory of the behavior of certain variables such as total production, crop production, total man hours, etc.

A central concept of the analysis is the *harvest ratio*, which is said to be a natural constant, and is defined as the total number of hours in a year divided by the number of hours in the "harvest period" for the given climate. For temperate zones the author evaluates this ratio as 8,766/1,100, or approximately eight. The *food equivalent* is the ratio of the total harvest, H , to the population, P ; and this ratio is also treated as a natural constant for a given environment. Its normal value is the amount of food necessary to keep one person alive for a year. The *harvest quota* is the amount of food necessary to keep all full time producers alive one year. It is equal to MH/P , where M is the number of full time workers.

The *absolute value* of all goods produced is said to be the harvest quota. Hence the absolute value of an average unit of goods is given by MH/PQ , where Q is the total production of goods. The physiocratic bias at this point is very noticeable. One is tempted to ask, is not fuel necessary to life in the north temperate zone as well as food? Could the enormous production of an industrialized society be maintained without the use of such non-alimentary items as shelter and clothing, etc.?

The total volume of production of all goods is measured by accumulating the tonnage of raw materials utilized in their production, irrespective of price. Here the technocratic bias enters the picture because of the assumption that values are proportional to weight.

Table 3 (p. 222) is introduced in support of certain theories. The total tonnage of raw materials consumed in the United States is shown by years from 1880 to 1929. These data do not measure total production even approximately if the index of industrial production published by Standard Statistics, Inc. is correct. Standard's index shows an increase in production of 1,143% from 1884 to 1929; whereas the raw materials index shown in Table 3 increased only 222% in the same interval of time. Of course, the Standard index does not include food crops, an omission which accounts for some of the difference. But the larger part of the difference in relative rate of growth is explained by the fact that the number of *stages* of industrial production was slowly increasing in the half-

century in question. Therefore, as time goes on, a given amount of raw material is exchanged (in different forms) more often, and is counted more often as an item of production. The author is on very dubious grounds when he substitutes consumption of raw materials for total production, Q .

Perhaps the most important conclusion of the book is that the ratio of total production to total harvest cannot exceed the value of eight in this country without a breakdown of the economic organization (p. 95); the reason being that the harvest ratio has a normal value of eight. It is easy to see that if the man-hours used in non-agricultural pursuits are seven times as many as those consumed on the farm, while the product of industry is nine or ten times as great in the one case as the other, then an hour of labor is worth more in manufacturing than in farming. In such case one might expect an exodus of labor from farms; but Nienstaedt concludes equilibrium would tend to be restored by displacement of workers in *both* industry and agriculture (p. 97). This means unemployment and economic disorganization. Table 3 shows that the ratio of Q to H in the United States reached a value of about eight for the first time in 1929. Hence came the Great Depression.

One must charge the author with another naive use (or misuse) of statistics in Table 4, (p. 226) wherein he shows data to support the view that the harvest ratio is equal to the ratio of national income to currency in circulation. Here he has apparently reproduced a series labeled "currency in circulation" in government reports, without comprehending that the economic significance of this series changed considerably while the label was retained. The average ratio of national income to this series turns out to be 10.90 (for the years 1880, '90, and 1900) after the series has been adjusted to make it mean more nearly what it seems to mean. The average ratio quoted by Nienstaedt is 7.81 for these years, a figure more nearly in agreement with his theory.

While these comments have been largely critical, the reviewer found the book very interesting and thought-provoking.

University of Florida

MONTGOMERY D. ANDERSON

The Movement of Factory Workers. By Charles A. Myers and W. Rupert Mac-laurin. New York: John Wiley & Sons, Inc., 1943. Pp. vii, 111. \$1.50.

In 1938 the Industrial Relations Section of the Massachusetts Institute of Technology undertook to make a study of the interactions of the demand and supply of labor in a medium-sized industrial community of Massachusetts. This study resulted in this small, thought-provoking monograph which has as its expressed purpose to find the answer to these questions: "How much inter-factory movement took place within the community (during 1937-39 and 1942)? What was the nature of the movement? Who were the people who moved? What were the principal barriers to movement between local firms? Did the movement of workers fulfill its functions of (a) equalizing wages and other conditions of work for comparable jobs? (b) distributing labor where the need was greatest? and (c) enabling workers to better themselves and to learn new occupations?"

The authors have pointed out several limitations to their study, such as inad-

quate personnel records, workers who moved from the community or whose contacts were otherwise lost to the study, those "who took non-factory jobs or were unemployed after leaving the factory, those who remained with one employer after entering the manufacturing labor market late in 1937, '38, '39, and those who were not employed at any time during the period in the principal manufacturing firms." Their major analysis was concentrated about the experience of some "1,500 workers who moved between the principal manufacturing and public utility firms in the community during 1937, '38, '39." The authors have maintained a very objective viewpoint throughout their interpretation of the data and have made no expansive claims as to the import of their findings. Their conclusions seem to be justified by the results obtained from the investigation. They have found that: (1) "Only a small proportion of the total movement of workers during 1937-39 took place between the principal factories of the community." (2) Moves were approximately 30 per cent voluntary and 70 per cent due to layoffs and discharges. (3) "There was a strong tendency for workers to move between industries and firms located in the same neighborhood." (4) Both forced and voluntary movements were primarily among young, short-service, low-paid workers and more frequently among women. (5) There were important barriers to free movement on both the demand and the supply side. Employers' and gentlemen's agreements were the main demand barriers. (6) Non-competitive practices on the supply side were such things as home ties, knowledge of vacancies coming mainly through friends and relatives, "the absence of effective vocational guidance by schools and the public employment service." (7) "Movement of lower-wage to higher-wage firms was largely ineffective in reducing differentials in rates for comparable jobs. These were influenced more by 'minimum-wage orders and pressure of unions'." (8) "Low-wage firms generally did not compensate for their poorer rates by providing better working conditions, welfare plans, or good 'informal-relations'." (9) "Because of various barriers to movement, the high-wage expanding firms probably did not succeed in getting the best working force that could be obtained." (10) "Movement between the principal factories was not successful in giving workers an opportunity to utilize their capacities and abilities as effectively as possible. There was some benefit from greater occupational versatility, but the opportunity to move by choice was open only to a very small percentage of the total factory labor force."

In 1942 the community under study had begun to feel the impact of the war economy. The authors returned and interviewed all of the firms still in business for the purpose of comparing the data of the 1937-39 period in which there was a good bit of unemployment with that of 1942. They found the following contrasts:

- (1) "There was a stronger tendency for workers to move from the lower-wage to higher-wage firms."
- (2) "The attraction of war jobs with better wages was overcoming somewhat the attachment of workers to neighborhood firms and industries."
- (3) There was a great willingness of workers to move voluntarily.
- (4) The gentlemen's agreements were breaking down between war and non-war

plants. (5) "Labor shortages in particular occupations had forced employers to turn increasingly to the public Employment Service, and the Service was measuring up to its greater responsibilities."

The authors conclude their treatise with some "Suggestions for the Future" in which they indicate that the undesirable labor conditions and inequalities between jobs and abilities can be more nearly corrected by government action and the broadening of collective bargaining than by voluntary movement of labor and the operation of economic forces. The authors suggest that industry will profit from improved personnel procedures and practices, through an improvement of and greater use of the Employment Service and through better vocational guidance by schools and the Employment Service. They conclude that all of the recommended practices will be of little permanent value unless something can be done to curb or eliminate the periodic depressions and the threat of insecurity which dominates the workers' lives.

The reviewer finds no ground for disagreement with either the method used in the study or the conclusions derived. This study is a step in the right direction and should stimulate others to make similar studies where conditions are favorable. The treatment is a concise statement of the results of the investigations and happily is devoid of such opinionated interpretations as often result from similar studies. The authors might have cautioned their readers against the common error of taking a well established fact based on specific data and enlarging it into a broad generalization or statement of principle. This study should add to the reader's understanding of the problem before the economist, the government and industry, in their attempts to solve economic problems as they are related to industrial relations.

North Carolina State College
University of North Carolina

T. W. Wood

Theodore Roosevelt and Labor in New York State, 1880-1900. By Howard Lawrence Hurwitz. New York: Columbia University Press, 1943. Pp. 316. \$3.75.

This book is a history of the political career of Theodore Roosevelt in New York with the main emphasis on his attitude at various stages of his career toward labor legislation and organized labor. During the period covered by the study organized labor in New York emerged as a powerful factor to be reckoned with by all persons seeking political office. Since Roosevelt found it necessary to deal with labor problems while holding various offices in the state, the book contains interesting information concerning the growth of the labor movement in New York as well as the development of labor legislation.

Most of the leading men of his day considered Roosevelt a dangerous liberal. However, the author shows that while he was from the beginning of his political career interested in bettering the conditions of the underprivileged and the victims of the sweatshop, he was by no means a friend of the labor movement. He sought to keep on good terms with labor leaders but his readiness at all times to use troops in labor disturbances caused labor leaders to doubt his sincerity. By

the time he became governor of New York he came to recognize that trade unions were necessary to the improvement of the working classes, but he could not tolerate the weapons used by unions to accomplish their desired ends since their use too often led to violence. Roosevelt considered violence in society a challenge to the state, and believed that under all conditions a threat to the state should be curbed by the use of troops. He often used the police and troops to break strikes that were accompanied by violence.

In the field of labor legislation and social reform Roosevelt worked more closely with organized labor. While governor of the state he succeeded in placing on the statute books numerous labor laws and a franchise tax which placed a more equitable share of the tax burden on large corporations. He also sought to have the labor laws of the state more effectively enforced.

The book is well written and especially well documented. Most of the material was gathered from original sources.

University of Virginia

GEORGE T. STARNES

Introductory Economics. By George T. Brown. New York: D. Appleton-Century Co., 1942. Pp. vii, 190.

Examinations in elementary economics are apt to disclose that even serious students contrive to amass much information without obtaining any real insight into the nature of the study. Lectures, discussions and collateral readings remain unconnected segments of an ill-defined mass of data. Teachers have striven to cope with the situation by dictating notes and outlines. Students have frequent recourse to study aids before the examination. *Introductory Economics* is intended to furnish the student with a carefully prepared streamlined presentation to be used during the period of instruction. It is designed to relieve the teacher of the burden of much dictation and to encourage the student to realize the relationship of each week's discussion to the development of an understanding of basic principles.

The author believes that the study of economic policy should follow the investigation of economic principles. Economic policy involves a choice of goals and objectives that is in turn conditioned by an individual's social philosophy. Combination of analysis and interest in policy "will convert the economist from a living recorder of human intelligence and human stupidity into a dynamic factor in the shaping of man's economic behavior." (p. 21)

The organization of the volume follows the classical divisions of production, exchange, distribution and consumption. "The definition of distribution as a matter of value determination has led economists to consider distribution as simply a part of the general subject of economic value." (p. 23) "One of the outstanding characteristics of the outline is the emphasis placed upon the imperfect nature of competition in our modern economy." (p. 3) The general treatment of topics follows what may be called the middle-of-the-road school of modern economists.

The employment of outlines as introductions to the various chapters enables the reader to benefit from the excellent summaries that follow. Every attempt

has been made to enable the student to build rather than to memorize. It is strange, however, not to be able to find definitions of wealth, free goods, and economic goods in a volume on introductory economics.

Introductory Economics will be of inestimable value to a serious student who is temporarily overwhelmed by the immensity of the field of a new subject. It will enable him to comprehend the significance of much of his readings and to develop an empirical economic theory. While comparison of conflicting positions is stimulating, it is futile to expect beginners to make decisions on points that baffle experts. The aim of an introductory course should be to give the student familiarity with methods of economic investigation and a readiness to subject beliefs to the test of experience. *Introductory Economics* can be employed in the development of attitudes and ideas to be tried and tested by more advanced studies.

University of Virginia

D. CLARK HYDE

The Advancement of Science, Vol. II, No. 7. Published by the British Association for the Advancement of Science, London, October 1942. Pp. xvi, 96. Five Shillings.

This issue of *The Advancement of Science* reports the proceedings of a conference held July 24-25, 1942, whose topic for consideration was "Mineral Resources and the Atlantic Charter." The purpose of this conference was to discuss mineral resources in connection with the promise held out by the fourth clause of the Atlantic Charter that "they will endeavor, with due respect for their existing obligations, to further enjoyment by all States, great or small, victor or vanquished, of access, on equal terms, to the trade and to the raw materials of the world which are necessary for their economic prosperity."

A wide range of topics was discussed including the following: the geological aspects of mineral formation and location; the influence of minerals on the location of industries; the location, production, consumption, and place in the post-war situation of certain metals, e.g. tin, nickel, and aluminum; minerals from the sea; and the mineral resources of the U. S. S. R. The article on the last-mentioned subject furnishes a useful inventory of minerals in Russia. The article concerning Minerals from the Sea is stimulating and illustrates well the dynamic nature of resources.

The location of mineral deposits is clearly the result of geological processes which have scattered minerals widely. Consequently we find today that no nation is self-sufficient in minerals. For example the so-called "key metals," chromium, manganese, nickel, tungsten, etc., which are used primarily in alloying steel, are in general not located in the countries containing the major iron deposits. These key metals, though they are used in small amounts, are essential in building up a modern war machine. For example, without nickel it would be impossible to make the tough steel needed for plate for tanks. Is it possible to prevent war by controlling the flow of key metals to possible aggressors? One speaker advanced the idea that the British Commonwealth, the United States, and Russia, if they so decided, could control the armaments' manufacture of

possible belligerent countries so as to make it impossible for them ever to go to war again. This would require not only quantitative control but also some degree of supervision over the use of these metals in manufacturing within countries. Such action would also require among the three major allies an unprecedented degree of good faith and co-operation.

A few of the speakers implied that equal access could be assured by the removal of tariffs and other trade barriers; others specifically advocated some form of wide-spread planning of production, distribution, and consumption of minerals in the world. The "equal access" of the former is probably more apparent than real. A university professor and Mr. Vanderbilt theoretically have equal access to yachts in the market. Equal accessibility of course does not exist. The free access advocated by some of the speakers appears to be of this nature. In its concluding resolution, the conference merely recommended the establishment of an International Resources Organization, to act as a fact-finding and advisory body for governments.

Resource economists, teachers of international trade and international economic relations, and those interested in postwar economic planning will find in this issue much useful factual material and the issues involved in world economic planning interestingly presented. They will find themselves challenged by this question: "Is it possible to establish a form of international control over minerals which will not only prevent future world wars but will actively promote world prosperity?"

University of North Carolina

HAROLD EMERSON KLONTZ

The World Coffee Economy with Special Reference to Control Schemes. By V. D. Wickizer. Stanford University, California: Food Research Institute, 1943. Pp. x, 258. \$3.00.

The importance of coffee in world trade, and especially in the export trade of several Latin-American countries and in the import trade of the United States, has long been familiar. Of greater significance to the student of international economics has been the fact that Brazil presented one of the earliest modern cases of an effort, on the part of a single national government, to stabilize prices in the world market for its chief product, though with a varying and at times very limited degree of success. This problem has recently taken on new interest, with the signing and operation of the Inter-American Coffee Agreement of 1940, which became one of the major examples of what are nowadays called international commodity agreements. Mr. Wickizer, with experience in both economics and the coffee business, under the auspices of the Food Research Institute, covers all aspects of this problem competently and in such a way as to make a contribution to this sector of the field of international economics.

On the basis of a comprehensive, thorough, and detailed examination of coffee production, trade, prices, and manipulation, the author examines impartially the various earlier Brazilian "valorization" and "coffee defense" schemes, and the provisions and workings of the new agreement whereby the United States "lends a hand" to its coffee-growing neighbors. His appraisal is thoughtful

and well balanced. But he warns against the idea that some hold, that this agreement will be a model for many similar cases in the postwar period. Some of the reasons that this may not prove feasible are: (1) the fact that the present arrangement involves United States subsidization of Latin-American neighbors; (2) that, accordingly, this burden, both direct and indirect, upon the public in the United States may not be permanently borne with complete resignation; (3) that the political motives involved may not continue in full force; (4) that after the war European markets for coffee will reopen, thus lessening the importance of the United States as the benevolent chief purchaser; (5) that production may develop in new areas; and (6) that the present agreement scarcely provides ultimate consumer representation, in the full sense. Although the study is objective, it suggests once more the basic difficulties in such world-market controls, which, with their commendable tendency toward stabilization combine two undesirable features—features not too long ago vigorously combated by the United States Government: the danger of creating artificial prices at the expense of the consumer country, and of preserving artificially the production of major commodities at cost above the point of effective world demand.

The George Washington University

JOHN DONALDSON

French Predecessors of Malthus, A Study in Eighteenth-Century Wage and Population Theory. By Joseph J. Spengler. Durham, N. C.: Duke University Press, 1942. Pp. ix, 398. \$4.50.

It is impossible adequately to review a book such as this one. It is in itself a detailed review, and a very competent one, of the theories of at least one-hundred French thinkers of the eighteenth century, predecessors of Malthus. Any attempt, therefore, to give more than a brief description of the contents of this book would be a futile use of time and printing materials. All those who are really interested in the subject matter treated in the book will desire to read it; those who are not would not profit from what might be said in a review.

There are altogether nine chapters. Chapter I is devoted to the pre-eighteenth-century French writers, of whom Bodin is perhaps the most important. The writers treated in this category formulated of course no systematic theory of economics or of any other of the social forces. They were concerned principally with the problem of population growth and how it might be promoted. The burden of their criticism was for the most part directed toward the defects such as they thought existed in the policies of the Ancient Regime. Their theories sometimes supported agricultural as opposed to mercantilistic philosophy; some preferred mercantilistic to non-mercantilistic policy. Such criticism was especially noticeable in the last quarter of the seventeenth century.

Chapters II and III present the views of "the neomercantilists, the agrarians, and the repopulationists." Representative of this group of thinkers are Melon, John Law and Goudar, varying in their opinions concerning the importance to the State of the quantity and quality of the population and of the influence of mercantilistic and non-mercantilistic forces in determining the quantity and quality desired.

Chapter IV has to do with the important ideas of Cantillon, who although a Scotchman, nevertheless wrote in French. Of all the eighteenth-century writers whose writings antedate the *Wealth of Nations*, Cantillon came nearer to the development of a *system* of economic philosophy than any other. Professor Spengler's treatment of Cantillon is therefore one of the most important contained in his book. As pointed out by the author, in the last half of the eighteenth century social thought, at least with respect to the thought of a few, came to be more schematic. Population and wage theory came to be a consistent and integral part of economic and political theory. Cantillon seems to have understood something of the economic law of diminishing returns, especially as it applies to the exploitation of natural resources and consequently as it acts as a limitation on population and the wage rate. Cantillon's view of luxury served as an effective corrective of the erroneous views of the physiocrats and other writers on this subject, especially as it relates to population growth and the standard of living for the masses. Turgot also came near to an understanding of the law of population and its relationship to the law of marginal productivity as later developed by Malthus. The author deals effectively with Turgot in Chapter VII, devoted to the nonphysiocratic economists, although Turgot is usually classed as a Physiocrat. Cantillon and Turgot best represent the trend toward systemization in thought as it developed in the last half of the eighteenth century and are so represented by the author.

The Physiocrats are treated in Chapter V. And, as would be expected, they represented the *produit net* and the *bon prix* as the most important forces favorable to population growth. They did, however, as shown by the author, have some vague idea of the restriction in population growth which limited natural resources produced, but they seem to have thought that France would not for hundreds of years reach that limit. As to population growth, the Physiocrats, consistent with their theory of the sterile, or non-productive classes of society, thought that mere numbers were not important to a state, but only that part of the population that contributed something to accumulated wealth or capital that is to be re-invested in agriculture. They thought, as shown by the author, that the optimum population could be achieved only by following a policy of *laissez-faire* in trade and agriculture and by living in accordance with the laws of the natural order. They did believe, however, that population might be stimulated and the condition of the poor bettered by placing all taxes on the *produit net*. Something of a wage-bund doctrine is found in their belief that wages and employment depended in large part on the amount of accumulated capital destined for investment in agriculture.

Chapter VI has to do with the more important of the eighteenth century philosophers, among whom are Montesquieu, Voltaire, Rousseau, Diderot, Condorcet. Generally the philosophers presented a great variety of theories as to the various aspects of demography, but it is not possible to discuss those theories in detail here. The philosophers were for the most part more optimistic with respect to progress than their English confrères. Some were institutionalists in their thought; others tended more to place emphasis on biological law,

while still others emphasized economic forces. Montesquieu is one of the best examples of the institutionalists but he was only mildly optimistic. The Abbé Saint-Pierre and Condorcet were optimists, believing that the solution of population problems depended almost solely upon the perfection of human institutions. Buffon represents those who approach the problem through a study of biological science.

Chapters VII and VIII are devoted to the "Nonphysiocratic" and "Extreme Anti-physiocratic" economists. Chapter IX contains conclusions and interpretations.

In conclusion and speaking generally of Professor Spengler's work, this reviewer was impressed by the wealth of documentary reference material cited; the excellent organization; and the effective, simple style employed. The author has done an enormous amount of research in order to make this book possible. Its principal value is found in the fact that it makes available in convenient form a wealth of social philosophy from many sources which otherwise might not have been available.

The printing is excellent, the price (\$4.50), excusable.

University of Florida

JOHN G. ELDRIDGE

The Rise of American Economic Life. By Arthur Cecil Bining. New York: Charles Scribner's Sons, 1943. Pp. xii, 732. \$4.00.

Dr. Bining divides his excellent book into four periods: the Colonial Era, Industrial Growth, Economic Expansion, and the Machine Age. For his first period he discusses in five chapters the economic awakening of Medieval Europe, the beginning of a new society, and colonial agriculture, industries, manufactures, and commerce. He devotes nine chapters to his next period, beginning it with the American Revolution and closing it with the Civil War. The intervening chapters give the rise of a new nation, the westward movement, transportation and communication, industrial changes, agriculture, commerce, and banking and finance. The third period discusses in ten chapters the rise of large-scale industrial enterprise, industrial consolidation and regulation, the organization of labor, the settlement of the Far West, the agrarian movement, conservation of natural resources, the rise of a New South, transportation, finance, and imperialistic ventures. The last period begins with the First World War and ends with the Second World War. The three intervening chapters are entitled: "The Machine Comes of Age," "The United States in a World-Wide Depression," and "Economic Activities of the New Deal."

The first and fourth periods are of nearly equal length and the second and third divisions, constituting slightly more than three-fifths of the content, are also of approximately the same length. The amount of space devoted to each division is about right in the opinion of the reviewer. The book has an abundance of good maps, graphs, and other illustrations. The maps number thirty-one, the graphs and charts number fifty-one, and the other illustrations total ninety-three. Another excellent feature of the text is a good bibliography for each chapter, suggestions for further reading being made under the various

topics discussed in the chapter. An analytical index adds to the value of the book.

Anyone can find fault with a textbook, and every reviewer, according to most people, is supposed to do so. Some people will think that Dr. Bining's first chapter is too ambitious in coverage. Others will think that some of the chapters are too brief on labor, commercial growth, or some other topic. Still other teachers will think that the forty years of our history from 1775 to 1815 deserve more attention than they receive. Some people will question statements, for instance, the comparison of the Molasses Act of 1733 and the Sugar Act of 1764 (p. 124). Others may accuse the author of unnecessary sarcasm, for some statements, notably (p. 618): "Meantime the presidential election took place. Of those who went to the polls almost 23,000,000 cast their vote for a New Deal, although nearly 16,000,000 apparently less affected, voted for Hoover." Still others may question grammar (p. 644).

The reviewer, nonetheless, believes that Dr. Bining has done an excellent job under difficult conditions. His style is readable; his explanation of obscure word phrases and customs is commendable and his organization is good. The publishers, too, deserve praise for their attractive and accurate mechanical work.

University of Kentucky

WALTER W. JENNINGS

The Free Produce Movement. A Quaker Protest Against Slavery. By Ruth Ketring Nuernberger. (Historical Papers of the Trinity College Historical Society, Series XXV. Durham: Duke University Press. 1942. Pp. ix, 147.)

This monograph is an objective, well-documented presentation of a minor phase of the abolition movement which has escaped the notice, if not the knowledge, of virtually all historians except those of Quakerism. Here appears for the first time and perhaps in definitive form the continuous factual story of the free produce movement, which was an organized effort to boycott goods in whose production slave labor was used.

In assembling the substantial body of data on this elusive subject, the author visited about twenty libraries from New England to California. A twelve-page classified bibliography, predominantly of primary sources, in part manuscript but chiefly printed, testifies to the obscurity, dispersion and paucity of the source materials but also to the fruitfulness of a thorough investigation.

The free-produce movement is interpreted not only as a rather unsuccessful phase of the abolition movement in the broad pattern of nineteenth century humanitarian reform but also as a radical minority movement within the conservative Society of Friends which contributed to the socialization and evangelization of Quakerism.

Though never officially sponsored by the Society of Friends, the free-produce movement drew its chief support from zealous individual Quakers, mostly simple plain people with small financial resources, who believed that it was sinful to encourage slavery by using the products of slave labor and that a boycott of these products would destroy the institution of slavery.

With the formation of the first free-produce society in 1826, the movement broadened from individual abstinence to formal organization. Twenty-six societies were organized between 1826 and 1856—nine in Pennsylvania, three in New York, one in Delaware, three in New England, one in North Carolina, and nine in the West. Philadelphia was always the chief center of the organized movement. Until 1838 the work was carried on by ten local societies in the Pennsylvania-Ohio area, but from 1838 to 1844 the American Free Produce Association dominated the movement. After 1845 the slavery controversy became more violent in the nation and within the Society of Friends and the boycott failed to become a major factor in the abolition crusade. The organized boycott of slave-labor goods was thenceforth virtually monopolized by Quakers who adopted it "as the form of anti-slavery protest least objectionable to their more conservative fellow-members." The eleven free-produce associations formed from 1845 to 1856 limited their membership to Quakers. The twenty-six organizations had a total membership of perhaps fifteen hundred, and as many as five thousand persons may have participated in some degree in the boycott of slave-labor goods. There were in operation at various times a total of fifty-three free-produce stores. The movement declined appreciably after 1856.

The free-produce movement was inadequately supplied with money for lecturers, printed propaganda, the systematic search for supplies of free-labor products, and the purchase and processing of the products. It was difficult and costly to segregate free-labor and slave-labor products in the economic processes of production, manufacturing and distribution. Chapters on "The Search for Free-Labor Products" and "George W. Taylor and His Work" are of chief interest to economists. Taylor operated a free-produce store in Philadelphia from 1847 to 1867, sought supplies of free-labor products, made special arrangements for the manufacture of cotton, and finally established a textile mill. The account of his work is based on a manuscript collection of his letters, papers and letter-books.

Obviously the free-produce movement had only limited influence and success. Its very existence represents a minor triumph of sentiment over economics; its failure represents a more normal and significant triumph of economics over sentiment. The luxury of using only cotton, tobacco, sugar, coffee and rice produced by free labor was so downright expensive and inconvenient as to be beyond the reach of all except the ultra-conscientious few.

University of North Carolina

A. R. NEWSOME

STATE REPORTS

ALABAMA

Economic activity in Alabama after experiencing a period of rapid expansion for the past several years appears to be leveling off onto a high plateau, where it may be expected to remain until post-war adjustments become necessary. Although several new plants are being constructed in the State, the cancellation of war contracts has already begun. Production indexes as computed by the Bureau of Business Research of the University of Alabama, have tended to register small declines during the first three quarters of 1943 as compared with the same period of a year ago. This was true of the production of coal, coke, steel, cement and cotton cloth. However, construction showed a sharp decline while electric-energy consumption for industrial purposes continued to rise. Production for the last quarter of the year will necessarily fall somewhat below normal, for work stoppages in the coal mines have already caused several blast furnaces to close down and other industries similarly affected to curtail their operations.

Indexes of business activity reflecting price changes have run well above those computed on the basis of volume. However, the increase in the dollar value of sales is considerably greater than the increase in prices alone during the past several years. A larger population and a substantial gain in per-capita income has served to increase sales and financial activities in all the main categories for which statistics are available. Bank debits, life insurance, fertilizer sales, sales of department stores and retail sales, of independent stores have all shown gains of from ten to twenty per cent above those of the first three quarters of a year ago. Surplus purchasing power is being employed to bid up the prices of real estate and of secondhand equipment of many kinds. Gasoline sales and savings and loan-association mortgage loans, as might be supposed, are showing on the contrary a perceptible decline.

A critical labor shortage in all the leading industrial sections of the State constitutes one of the most unusual phenomena of the present period. Alabama normally has a surplus of labor, especially of the unskilled variety, and must necessarily lose large numbers to other parts of the country. During the first three quarters of this year, U. S. Employment Service placements have been well above those of a year ago, and "Help Wanted" signs are appearing at factory gates for the first time in many years. A disappointing feature of this situation is the apparent lack of interest of employees in the training programs provided for industrial workers. Both the vocational education and the engineering, science, and management war-training programs have had to curtail sharply their activities because of a pronounced lack of interest and qualified trainees. Colleges and universities having lost the greater part of their regular student bodies are devoting their facilities to the training needs of the armed forces. Plans are already being made to provide rehabilitation training and other educa-

tion for returning soldiers and sailors and for others who must re-train for peacetime occupations.

University of Alabama

E. H. ANDERSON

NORTH CAROLINA

Activity in the war industries of North Carolina is beginning to level off at the end of the third quarter of 1943. Other economic activity showed a slight decrease over the preceding period. Electric power production reached an all-time high in August but tended to level off in September. This is a good indication of what is taking place in war-manufacturing industries. Bank debits in the nine largest cities of the state rose slightly during the period. Cotton consumption, which reached an all-time high during April, decreased during May, June and July, but regained some of the loss during September and August. There has been a slight downward trend in non-agricultural employment during the period, due largely to selective service, migration, or return to farms. The latter is a result of the favorable treatment of essential farm labor by the selective service. Department store sales continued at a very high level but declined slightly during September. Department store inventories have held up remarkably well, taking everything into consideration, and were only about 6 per cent below the level of a year ago. Wholesale trade in five lines has continued generally downward since February particularly in hardware and shoe sales. Building contract awards were approximately 81 per cent lower in August than they were in the same month of 1942 and were 22 per cent lower for the first eight months of this year as compared with last year. Cigarette production continued to rise slowly and was about 8 per cent higher for the first nine months of 1943 than for the same period of 1942. Figures for lumber, ship building, and other war industries are not available, but indications are that they are at capacity production. Rayon yarn and staple fiber shipments remained well above the figure for 1942 but tended to decrease during the period.

* * * * *

Harvesting conditions were not so favorable for the tobacco crops but have been very good for cotton and other crops. It is too early to give final figures for crop results but indications are that farm incomes will show another increase this year. Farmers have concentrated more on crops necessary for the war effort. There has been an increase in the total acreage and at the same time part of the land usually used to grow cotton and tobacco has been used to produce food and feed crops. The farmer has had to contend with several unfavorable conditions during this crop year. These include shortages in labor, tools, machinery, proper types of fertilizer and the poor timing of fertilizer receipts, higher wages for labor; automobile, truck, gas, and tire shortages, shortages in batteries, flashlights, containers of all kinds, and the inability to get repairs promptly and efficiently. Prices for farm products have reached a 23-year high but increases in cost items may hold the net farm income to small increases over the crop season of last year. One specific item of importance is the tendency for farmers

to sell their milk and cream rather than convert it into butter. Farm wages are up approximately 100 per cent over pre-war levels. While the tobacco crop is less than it was last year, the price is up 76 cents per hundred pounds to an average of \$39.34.

* * * * *

Employment in manufacturing, which includes the bulk of non-agricultural labor in North Carolina, declined approximately 2.3 per cent during the third quarter of 1943. There was an increase of about 3.3 per cent in non-manufacturing employment with a net result of about a 2 per cent decline in total employment. In manufacturing, payrolls declined 1.3 per cent, average weekly earnings increased 1.3 per cent, weekly hours declined .2 per cent but the average hourly wage rate increased about 2 per cent. Payrolls in non-manufacturing rose 2.5 per cent, average weekly earnings decreased .7 per cent, weekly hours decreased 2.1 per cent, but average hourly wages rose 1.4 per cent. The totals for manufacturing and non-manufacturing show that payrolls decreased 1.1 per cent, weekly earnings rose 1 per cent, weekly hours declined .2 per cent with a net increase of 1.6 per cent in the average hourly wage rate. The State Department of Labor reports the following specific rates at the close of September: pulp mills 90.2 cents (per hr.); printing and publishing, 87; full-fashioned hosiery, 73.4; tobacco products, 72.9; woolen mills, 62.4; rayon, 60.3; dyeing and finishing, 58.3; cotton textiles, 57.5; seamless hosiery, 55.6; furniture, 54.4; flat knit goods, 52.5; fertilizer, 51.6; lumber, 50.9; paper boxes, 50.3; brick, tile, and terra cotta, 50.1; and cotton seed oil, 43.9. Wage rates in non-manufacturing enterprises ranged from 78.3 cents in wholesale trade to 27.4 cents in hotels. The number of permits to children issued by the Labor Department declined during all three months of the third period. The number of permits issued since Pearl Harbor totals 81,773 through September. Of these 14,212 were issued during the third quarter. These permits run about 70 per cent for manufacturing and construction, and 30 per cent for non-manufacturing; about 60 per cent boys and 40 per cent girls.

Industrial committees operating under the Wage and Hour Law have recommended a 40-cents-an-hour minimum for the Communication, Utilities, and Miscellaneous Transportation Industries. If the recommendations are put into effect by the administrator of the law, all industries covered by the law will have reached the statutory minimum almost two years before the date set by the law, October 24, 1945. There are some firms, however, who are not meeting the requirements of the law especially as regards wage rates and overtime payments. The inspections under the Wage and Hour Law and the Public Contracts Act during August and September showed that out of 261 firms inspected, 52 firms were violating either the overtime or rate provisions or both. The violators were required to pay \$35,415, in restitution payments.

* * * * *

Public revenues in the State of North Carolina continued to rise during the third quarter of 1943. The Revenue Division reported an increase in tax receipts

and miscellaneous income of \$1,263,646.94 or 9.52 per cent for the three months ending September 30 of 1943 as compared with the same period of 1942. The Gasoline Division reported a decrease of \$547,947.95 or 8.74 per cent. These two sources provided a net increase of \$715,698.99 or 3.66 per cent. The Department of Motor Vehicles reported an increase of \$102,657.76 or 14.71 per cent from auto licenses, drivers' licenses, title fees, and bus and franchise collections.

*North Carolina State College
University of North Carolina*

T. W. Wood

TENNESSEE

Unemployment reserves have reached a total of approximately \$45,000,000 as announced by State Labor Commissioner S. E. Bryant in his report for the fiscal year ending June 30. There are some 650,000 workers eligible for unemployment benefits now as compared with 292,000 in January, 1940. Wages in covered employment for the first quarter of 1943 totaled \$165,878,699 as compared with \$74,406,902 for the same period of 1940. Payments have declined as employment has increased during the past three years. For September, 1943, the payments amounted to only \$146,056, the lowest payments for any month since the beginning of the program. These figures emphasize the continuing high level of employment and industrial activity throughout the state.

The housing shortage, resulting from expanded war production in the Knoxville area, is being met through a projected \$10,000,000 home-building program recently announced by the National Housing Agency. It is estimated that this program will provide some 3000 additional war-housing accommodations through the construction of 2000 privately financed family dwellings; the conversion of some 500 family units through private funds; and the provision of 500 family units through the publicly financed conversion of properties to be leased by the Government. The heavy influx of workers to areas of the war plants has placed severe burdens on local governmental services. This has been a particularly difficult problem for school officials and has necessitated the granting of funds for school purposes by the Federal government. Anderson County was granted some \$355,347 and \$13,928 has been approved by the Government for the Clinton schools.

Tennessee's revenues continue to shrink, according to the latest report of the Department of Finance and Taxation. Collections for the four months ending October 31, 1943, showed a decrease of \$478,016, or 2.7 per cent, over the same period of 1942. Among those sources showing a decline for this period were the following: excise, income, inheritance, gasoline, fuel inspection, beer, motor vehicle, and alcohol taxes. Those taxes showing increases include: utility, franchise, tobacco, bridge tolls, carbonic gas, privilege, and gross receipts. The decrease in gasoline tax collections of \$543,499 was by far the largest single decline.

Expenditures for Tennessee from the highway and general funds have shown a decrease of some \$5,384,468 for the fiscal year ending June 30, 1943, as compared with the previous year, reports R. Burrell Harris, State Director of Ac-

counts. For the fiscal year ending June 30, 1943, these expenditures totaled \$43,230,853 as compared with \$48,615,321 for fiscal 1942. Approximately \$5,000,000 of this decline in expenditures is attributable to the drop in road construction.

On September 15, 1943, Commissioner James M. McCormack of the State Department of Insurance and Banking released his annual report. The Department's collections were the largest in its history while its expenses were reduced. Net premium receipts in Tennessee by all companies authorized to transact business in the state showed an increase in 1942 of \$8,161,633 over those for 1941, the 1942 total being \$87,056,099. Net claims paid in 1942 totaled \$28,945,481, a decrease of \$408,076 from those paid in 1941.

The refusal of the Tennessee Supreme Court to rehear a petition for poll-tax repeal has left organizations and citizens with two courses in seeking the repeal of this tax. These are (1) to persuade the county courts to throw out the county's \$1 share of the \$2 poll tax and (2) to seek an amendment to the state constitution. Already the first course has been successfully sponsored in more than 30 counties; the second course is far more difficult since no constitutional amendment has succeeded in the state.

The fourth annual session of the Institute of Local Government, sponsored by the University of Tennessee, was held at Chattanooga, Tennessee, November 17th. Mr. Walter W. Heller of the Division of Tax Research, U. S. Treasury Department, discussed the co-ordination of local, state and Federal revenue systems. Dr. George S. Wehrwein of the University of Wisconsin, discussed county governmental problems and Mr. Frederic Bass of the American Public Works Association, discussed the problems of public works and post-war reconstruction.

University of Tennessee

T. L. HOWARD

VIRGINIA

Business activity during 1943 continued at a high level in Virginia. Tobacco manufacturing reached a new record level of production, and most war plants and shipyards operated near capacity. There was, however, a slight overall decline in employment in Virginia's non-agricultural industries, primarily because of a reduction in the available labor force, despite the continued large demand for workers. Nevertheless, retail trade, as reflected in department store sales in Virginia, increased 21 per cent during the first nine months of 1943 over the same period in 1942. During September 1943 debits to individual bank accounts in eight Virginia cities increased by about 25 per cent above the same month in 1942.

The harvesting of fall crops progressed fairly satisfactorily in spite of the short supply of labor. Although there was a general increase in acreage planted in 1943, production of most farm crops declined several per cent below the previous year's record yield. Among the important crops in which decreases occurred were corn, wheat, apples, and peaches; tobacco production was approximately equal to last year; and increases were recorded in peanuts and potatoes.

The financial condition of the State was further strengthened during the fiscal

year ending June 30, 1943. Total revenues for the period were \$147,572,308, an increase of \$15,898,055 over the preceding year, while expenditures amounted to \$123,820,852, an increase of \$13,597,594. A surplus of \$23,751,386 thus resulted from the year's operations. At the end of the preceding fiscal year 1941-1942, the surplus was about \$30,000,000. Several appropriations were made from this amount, including approximately \$16,000,000 appropriated by a special session of the Virginia General Assembly for investment in securities sufficient to retire the State debt as it matures until final liquidation in 1966. Virginia has thus, in effect, liquidated her debt and on June 30, 1943, had an aggregate surplus of about \$40,000,000, one-fifth of which was in cash.

In a study recently published by the State Department of Taxation, the estimated true value of locally taxable wealth in Virginia on January 1, 1942, was \$3,700,522,688, of which about \$2,500,000,000 was locally taxable real estate.

In September the Virginia State Planning Board published a handbook on *Postwar Planning* containing preliminary and tentative programs designed to meet the problems that will probably confront the State in both the immediate and long-run postwar periods. Five broad fields of planning were considered by separate advisory committees, which formulated programs in public-works planning, industrial planning, general improvement planning, agricultural planning, and travel-trade planning. Emphasis was placed on the necessity for co-operation between State and local agencies, with major responsibility to be assumed by local authorities, if the broad program is to be successfully developed.

University of Richmond

GEORGE M. MODLIN

PERSONNEL NOTES

The following officers have been elected by the Southern Economic Association for the year 1943-44:

President, D. Clark Hyde, University of Virginia,

Vice-president (Program), T. W. Glocker, University of Tennessee,

Vice-president (Membership), E. F. Wallace, Millsaps College,

Secretary-Treasurer, E. F. Ward, Clemson College, South Carolina.

* * * * *

Clark Lee Allen, former Regional Economist with the Office of Price Administration in Atlanta, has returned to Duke University and is teaching in the Graduate Army Finance School.

Mr. John P. Gill, instructor in commercial mathematics and statistics at the University of Alabama, is to become Economic Analyst for the Federal Reserve Bank of Dallas, Texas.

Mr. Meredith V. McDougal, instructor in economics at the University of Alabama has resigned his position to accept employment in a war industry in New Orleans, Louisiana.

Dr. G. Etzel Percy, assistant professor of economic geography at the University of Alabama, has resigned his position to join the staff of an airline company.

Miss Allene Smith, B.S. in C. & B.A. University of Alabama and M.B.A. Northwestern, has been appointed Acting Statistician in the Bureau of Business Research and Instructor in Statistics at the University of Alabama.

COMMUNICATION

Due to the space limitations involved in book reviewing, Dr. Keister's review of my *Planning for the South*, which appeared in the October issue of the *Southern Economic Journal*, inadvertently gives the impression that I am opposed to collective bargaining. I should appreciate an opportunity to correct this impression.

My fundamental thesis, about which there will inevitably be considerable difference of opinion among economists, is that the scarcity of capital and the abundance of labor in the South relative to the industrial Northeast make it natural for Southern enterprise to make generous use of the abundant factor and careful use of the scarce factor. In the absence of interventions, this leads to a level of wages in the Southern region lower than in the Northeast and a rate of return on capital somewhat higher. The effect of these relationships is to attract capital to the South and to draw labor toward the Northeast, thus promoting diversification and the steady mopping up within the area of the population surplus which accumulates on Southern farms. In so far as governmental interventions are desirable, and I recognize the need of far-reaching interventions, these should, as Walter Lippmann has put it in *The Good Society*, be designed "to make capital more mobile than labor."

It is against this theoretical background that I expressed the view that collective bargaining on a national scale, aiming as it does at a marked reduction in regional wage differences, promises to slow down the rate of industrialization and diversification in the South and to increase the movement of surplus Southern labor out of the region.

I have emphatically endorsed trade unionism and collective bargaining in a liberal society but have argued that in the post-war world, in which government will probably spend vast sums for the training and re-training of men, there is no place for the closed union or the closed shop. It is the efforts of national unions to gain these powers and to use them to protect labor standards in the old and established industrial centers which lead me to characterize collective bargaining as detrimental to the long-run interests of the South. While I am not happy about the prevailing low wage scale in the South, I do believe that excessive narrowing of the differential by collective action, whether through government, as in the Fair Labor Standards Act as now administered or through organized labor as it now operates, will do more harm than good.

JOHN V. VAN SICKLE.

REPORT OF TREASURER OF SOUTHERN ECONOMIC ASSOCIATION

RECEIPTS AND EXPENDITURES FOR THE FISCAL YEAR ENDED OCTOBER 31, 1943

November 1, 1942, Cash on Hand..... \$702.35

RECEIPTS:

Annual memberships.....	\$480.00	
Institutional memberships.....	20.00	
Dividends on Investment.....	3.25	503.25
		<u>\$1,205.60</u>

EXPENDITURES:

Stamps.....	12.00
Printing and supplies.....	2.50
Miscellaneous.....	5.30
	<u>19.80</u>

Southern Economic Journal..... 326.00 345.80

Fund Balance, October 31, 1943..... 859.80

\$1,205.60

Fund Balance Represented by:

Cash.....	356.55
Investments.....	503.25
	<u>\$859.80</u>

Clemson, South Carolina
November 3, 1943

JAMES E. WARD, *Treasurer*

Investment Account

Deposited in Fort Hill Federal Savings and Loan Association (February-August 1943).....	500.00
July 6—Dividends for January-June 1943, Reinvested.....	3.25
	<u>\$503.25</u>
Total invested as of November 1, 1943.....	\$503.25

Clemson, South Carolina
November 1, 1943

JAMES E. WARD, *Treasurer*

THE SOUTHERN ECONOMIC JOURNAL: STATEMENT OF INCOME AND EXPENSE FROM
NOVEMBER 1, 1942 THROUGH OCTOBER 31, 1943

Cash Balance, November 1, 1942 \$1,280.13

INCOME:

Grants:

University of North Carolina	\$500.00	
North Carolina State College	250.00	
Woman's College, University of North Carolina	250.00	

Total Grants		\$1,000.00
Annual Membership Fees		326.00
Subscriptions	809.00	
Less Refunds	6.00	803.00

Advertising

Receivables Preceding Year Collected	122.50	
Current Year	242.50	
Receivables Current Year	41.25	406.25

Miscellaneous Sales		71.50
---------------------------	--	-------

Total Income		2,806.75
--------------------	--	----------

Total Cash Balance and Income		\$3,886.88
-------------------------------------	--	------------

EXPENSES:

Supplies and Materials		52.80
Postage		121.67

Printing the Journal:

Current Year	1,332.75	
Payable Current Year (October 1943 issue)	438.37	1,771.12

Other Printing		19.88
General Expense		289.45

Total Expenses		2,254.92
----------------------	--	----------

Balance, October 31, 1943		\$1,611.96
---------------------------------	--	------------

Balance Represented by:

Cash	1,570.71	
Accounts Receivable		41.25

Total		\$1,611.96
-------------	--	------------

D. H. BUCHANAN
Managing Editor

BOOKS RECEIVED

- History of the Latin-American Nations.* By William Spence Robertson. New York: D. Appleton-Century Company, Inc., 1943. Pp. vii, 537. \$4.00.
- Social Aspects of Industry.* By S. Howard Patterson. New York: McGraw Hill Co., 1943. Pp. xviii, 536. \$3.00.
- Quantitative Trade Controls. Their Causes and Nature.* League of Nations. Princeton N. J.: Princeton University Press, 1943. Pp. 45. \$5.50.
- Trade Relations Between Free-Market and Controlled Economies.* League of Nations. Princeton, N. J.: Princeton University Press, 1943. Pp. 92. \$1.00.
- The World Coffee Economy with Special Reference to Control Schemes.* By V. D. Wickizer. Stanford University, Calif.: Stanford University Press, 1943. Pp. x, 258. \$3.00.
- Production Control.* By Asa S. Knowles. New York: The Macmillan Company, 1943. Pp. X, 271. \$2.50.
- Theodore Roosevelt and Labor in New York State.* By Howard Lawrence Hurwitz. New York: Columbia University Press, 1943. Pp. 316. \$3.75.
- Federal Tax Accounting.* By J. F. Sherwood and C. R. Niswonger. New York: South-Western Publishing Co., 1943. Pp. iv, 507.
- Excess Profits Taxation.* By Kenneth James Curran. Washington, D. C.: American Council on Public Affairs, 1943. Pp. vii, 203. \$3.50 (cloth edition), \$3.00 (paper edition).
- The Labor Legislation of New Jersey.* By Philip Charles Newman. Washington, D. C.: American Council on Public Affairs, 1943. Pp. xii, 149. \$2.00 (paper edition).
- Earnings and Social Security in the United States.* By W. S. Woytinsky. Washington D. C.: Committee on Social Security, Social Science Research Council, 1943. Pp. xiii, 260. \$2.50.
- Some Factors in the Development of Market Standards, with special reference to Food, Drugs and Certain Other Household Wares.* By Edward Eugene Gallahue. Washington, D. C.: The Catholic University of America Press, 1942. Pp. xiii, 209.
- The Economic Development of the Shreveport Trade Area.* By S. A. Caldwell. Baton Rouge, La.: Louisiana State University Press, 1943. Pp. 30.
- American Economic History.* Fifth Edition. By Harold Underwood Faulkner. New York: Harper & Brothers Publishers, 1943. Pp. xxiii, 784. \$3.75.
- Commercial Policies and Trade Relations of European Possessions in the Caribbean Area.* Report No. 151, Second Series. Washington, D. C.: United States Tariff Commission, 1943. Pp. 324. \$4.00.
- Investigacion Economica, Tomo III, Numero 2.* Mexico: Escuela Nacional De Economia, 1943. Pp. 94. 1.50 pesos.
- Economic Analysis and Public Policy.* By Mary Jean Bowman and George Leland Bach. New York: Prentice-Hall, Inc., 1943. Pp. xix, 935. \$4.50.
- The Advancement of Science, Vol. II, No. 7.* London: British Assn. for the Advancement of Science, 1942. Pp. xvi, 94. Five shillings.
- The Movement of Factory Workers.* By Charles A. Myers and W. Rupert MacLaurin. New York: John Wiley and Sons, 1943. Pp. viii, 111. \$1.50.
- From Economic Theory to Practice.* By E. Ronald Walker. Chicago: The University of Chicago Press, 1943. \$3.00.
- Using the Wealth of the World.* By Robert I. Adriance. Boston: Little, Brown and Co., 1943. Pp. xiii, 429.

- The United States Conciliation Service.* By Reverend Vincent I. Breen. Washington, D. C.: The Catholic University of America Press, 1943. Pp. xi, 258.
- Illinois Business Activity 1937-1942.* By Bureau of Economic and Business Research. Compiled by Florence L. White. Urbana: University of Illinois, 1943. Pp. 76.
- Post-War Migrations. Proposals for an International Agency.* Introduction by Paul Van Zeeland. New York: Research Institute on Peace and Post-War Problems of the American Jewish Committee, 1943. Pp. 54.
- Prices in a War Economy. Some Aspects of the Present Price Structure of the United States.* (Our Economy in War, Occasional Paper 12). By Frederick C. Mills. New York: National Bureau of Economic Research, 1943. Pp. 102.
- Boot Straps.* The Autobiography of Tom M. Girdler. In collaboration with Boyden Sparkes. New York: Charles Scribner's Sons, 1943. Pp. 471. \$3.00.
- Handbook of Tabular Presentation.* By Ray Ovid Hall. New York: The Ronald Press Co., 1943. Pp. viii, 112. \$3.50.
- Food Enough.* By John D. Black. Lancaster, Penna.: The Jaques Cattell Press, 1943. Pp. vii, 269. \$2.50.
- Fundamentals of International Monetary Policy.* By Frank D. Graham. Princeton, N. J.: International Finance Section, Dept. of Economics and Social Institutions, Princeton University, 1943. Pp. 23.
- Wartime Government in Operation.* By W. H. Nicholls and John A. Vieg. Philadelphia, Penna.: The Blakiston Co., 1943. Pp. xiii, 109. \$3.50.
- A Study of Retail Trade Areas in East Central Illinois.* By P. D. Converse. Urbana: University of Illinois College of Commerce and Business Administration, Bureau of Economic and Business Research, 1943. Pp. 68.
- Present Savings and Postwar Markets.* By Sumner H. Slichter. New York: McGraw-Hill Co., Inc., 1943. Pp. iv, 73. \$1.00.
- The Tariff Reform Movement in Great Britain, 1881-1895.* By Benjamin H. Brown. New York: Columbia University Press, 1943. Pp. x, 170. \$2.50.
- The Danube Basin and the German Economic Sphere.* By Antonin Basch. New York: Columbia University Press, 1943. Pp. xviii, 275. \$3.50.

American Economic Review

VOLUME XXXIII

Contents

DECEMBER, 1943

After the Food Conference:

The International Food Movement.....	John D. Black
Food Policies of the United Nations	Jean A. Flexner
American Post-War Social Security Proposals.....	E. E. Witte
Socialist Planning and International Economic Relations.....	B. F. Hoselitz
Some Aspects of Value and Capital in a War Economy.....	E. W. Swanson
Ideology and the Unions.....	Jack Barbash
Communications, Reviews, Periodicals, and Notes	

The AMERICAN ECONOMIC REVIEW, a quarterly, is the official publication of the American Economic Association and is sent to all members. The annual dues are \$5.00. Address editorial communications to Dr. Paul T. Homan, editor, AMERICAN ECONOMIC REVIEW, % Brookings Institution, 722 Jackson Place, N.W., Washington, D. C. (temporary address); for information concerning other publications and activities of the Association, communicate with the Secretary-Treasurer, Dr. James Washington Bell, American Economic Association, Northwestern University, Evanston, Illinois. Send for information booklet.

THE JOURNAL OF POLITICAL ECONOMY

Edited by JACOB VINER and F. H. KNIGHT

Department of Economics, The University of Chicago

The December, 1943, issue will contain:

- MONETARY DISORDER AND ECONOMIC DECADENCE IN SPAIN, 1651-1700
By Earl J. Hamilton
- MAN OF HIS CENTURY: A RECONSIDERATION OF THE HISTORICAL SIGNIFICANCE
OF KARL MARX - - - - - By Solomon F. Bloom
- HOW GOVERNMENT PURCHASING PROCEDURES STRENGTHEN MONOPOLY ELEMENTS.
By Wesley C. Ballaine
- THE EVOLUTIONIST REVOLT AGAINST CLASSICAL ECONOMICS. II. IN ENGLAND
—JAMES STEUART, RICHARD JONES, KARL MARX - - By Henryk Grossman

FOUNDED IN 1892. Published bi-monthly: February, April, June,
August, October, December. Subscription \$5.00 per year. Canadian
postage, 24 cents; foreign postage, 60 cents. Single copies, \$1.00.

The University of Chicago Press • 5750 Ellis Ave., Chicago, Ill

When you write to our advertisers, please mention The Southern Economic Journal.

Three NEW Books

Of Interest To Economists

SOUND POLICIES FOR BANK MANAGEMENT

By Robert G. Rodkey, *Professor of Banking and Investments,
University of Michigan*

CONCERN in this book is not with technical routine but with major policies to be decided by executives for the successful operation of a bank today. The author recognizes wide divergence of opinion and makes an effort not to offer "right" answers to all problems but to advance many ideas and stimulate reappraisal. The volume centers around the heart of banking, the sound utilization of funds, and deals with the fundamental difficulties that have always confronted banks and the numerous changes arising since the early depression years which make present problems more difficult of solution:

Decline in short-term commercial loans and high grade bond yields; thinning capital margins; risks of changing interest rates and depreciation of assets; price competition with business for future executive talent.

The Foreword by Frederic H. Curtiss, Chairman of the Board, Federal Reserve Bank of Boston (1914-1942), explains why the urgency of the problems makes the book opportune and helpful. 220 pages. **To be Published in January. \$4.00**

HANDBOOK OF TABULAR PRESENTATION

By Ray Ovid Hall, *Economist and Statistician, Washington, D. C.*

ASTYLE Manual and Case Book to show "how to design and edit statistical tables." This is a phase of statistics in which available guidance is meager so the book is highly valuable to provide information needed by economists, accountants, statisticians, engineers, editors and all others who must rely on tables to set forth their facts and conclusions. Shows how to design good statistical tables; how to recognize and improve bad ones.

PART I. PRINCIPLES OF TABULAR CRITICISM, covers features common to all tables.

PART II. ILLUSTRATIVE TABLES, study of specific tables; editing for improvement.

PART III. PRACTICE PROBLEMS—on the principles developed in Parts I and II.

The book includes not only principles but technical details to enable one to direct typist and printer. 120 pages, size 8½ x 11 inches. **Just Published. \$3.50**

CORPORATION ACCOUNTING

By William T. Sunley and William J. Carter, *Certified Public Accountants*

SPECIFICALLY devoted to accounting and legal considerations of corporate capital structure to meet the definite need for an up-to-date, specific manual of policy and procedure within this field where changes and emphasis in corporation accounting have centered, particularly in recent years. Some important features: treatment of borrowed capital; intercompany transactions; indicating corporate capital on financial statements; reorganization; references to A.I.A. and S.E.C. regulations and reports of recent years; illustrations from current practice.

The book deals with *surplus* under headings: Paid in or Capital, Earned, Revaluation, and Distribution of Surplus. It covers Bonds and Debentures, Issuance, Premium, Discount, Conversion, Retirement, Calling and Sinking Fund Accounting. Covers Voluntary Liquidation, Dissolution, Reorganization, Bankruptcy, Reorganization for Debt Relief. *New Revised Edition.* 111 pages **Just Published. \$5.00**

General Catalog of Books Sent on Request

THE RONALD PRESS COMPANY

15 East 26th St., *Established 1900*, New York 10, N. Y.

THE ECONOMICS OF CONTROL

By Abba P. Lerner. The conditions for the greatest use of resources in collectivist, capitalistic, and controlled economies are studied in this new text. The nature and limits of perfect competition are examined as well as devices for bringing about the desirable results of perfect competition when competition itself is impossible or unstable. This analysis is then applied to the problems of distribution, simple and complex production, rent, national debt, etc. *Ready in February. \$3.50 (probable)*

WAGE DETERMINATION UNDER TRADE UNIONS

By John T. Dunlop. This new book is concerned with answering three questions—what trade unions attempt to maximize, what effects they have upon wage rates, and whether they can influence the share of income and costs which goes to wage earners. To this end the author poses the issues in terms of a generalized study of markets to show how changes in one product or factor market may be transmitted through the system. *Ready in January. \$3.50 (probable)*

COMPARATIVE ECONOMIC SYSTEMS

By Ralph H. Blodgett. The first part of this new college text analyzes, compares, and evaluates capitalism, theoretical socialism, theoretical communism, practical socialism in Soviet Russia, fascism in Italy, and National Socialism in Germany. Part two is devoted to an unusually thorough analysis, interpretation and criticism of Marxian Socialism. The book is organized by topics with summary chapters giving pictures of each system as a whole. *Ready in February. \$4.50 (probable)*

ELEMENTARY STATISTICAL METHODS APPLIED TO BUSINESS & ECONOMIC DATA

By William A. Neiswanger. A thorough and up-to-date general survey of the methods and interpretation of economic or business statistics is provided in this new text. It gives expert training in making and understanding calculations, recognizing the assumptions made in the computations and how these condition and limit the interpretation of any single statistical measure.

A laboratory manual containing many and varied problems, prepared by the author and Floyd Haworth of the University of Illinois, will be available for use with this text.

Ready in December. \$4.25 (probable)

The Macmillan Co., 60 Fifth Ave., New York 11

When you write to our advertisers, please mention The Southern Economic Journal

W A N T E D

BACK COPIES OF

THE SOUTHERN ECONOMIC JOURNAL

There are rather frequent calls for complete sets of this *Journal*, generally from libraries. A few of the back issues are out, or nearly out, of stock. Anyone able to contribute, to sell, or to induce others to sell, any or all of the following numbers will be doing the *Journal* a great service. The price is

ONE DOLLAR PER COPY

FOR ANY OF THE FOLLOWING ISSUES IN REASONABLE CONDITION.

Vol. I, No. 1; Vol. II, No. 2: No. 4; Vol. III, No. 1: No. 2: No. 3; Vol. IV, No. 1; Vol. VI, No. 1.

THE SOUTHERN ECONOMIC JOURNAL

BOX 190

CHAPEL HILL, N. C.

THE SOUTHERN ECONOMIC ASSOCIATION

OFFICERS OF THE SOUTHERN ECONOMIC ASSOCIATION:

President

D. Clark Hyde, University of Virginia

Vice-Presidents

T. W. Glocker, University of Tennessee

E. F. Wallace, Millsaps College

Secretary-Treasurer

James E. Ward, Clemson College

Editors of Publications:

R. P. Brooks, University of Georgia

B. U. Ratchford, Duke University

E. L. Rauber, Alabama Polytechnic Institute

EXECUTIVE COMMITTEE

OFFICERS OF THE ASSOCIATION

E. Z. PALMER, *University of Kentucky*

MALCOLM BRYAN, *Federal Reserve Bank of Atlanta*

RALPH C. HON, *Philadelphia, Pa.*

Membership dues in the Association are: annual \$3.00, sustaining \$5.00, contributing \$10.00, life \$60.00, institutional \$10.00. Membership fees include \$2.00 in payment for a year's subscription to the *Southern Economic Journal* at the special rate granted to members of the Southern Economic Association.

Applications for membership should be addressed to James E. Ward, Clemson Agricultural College, Clemson, South Carolina.

BLAKISTON BOOKS**NICHOLLS and VIEG**

Wartime Government in Operation

*Sponsored by the American Council
on Public Affairs*

A constructive analytical study of our governmental wartime policies, with major emphasis on the food program and labor policy. The analysis which this book makes of the reciprocal effects of agricultural policy and labor policy is the key to an understanding of our war mobilization and stabilization programs. The sound diagnosis of the deficiencies in our governmental attitudes and machinery, the evaluation of past and present measures and the practical policy recommendations make this book valuable to students of economics and government and everyone interested in politics.

By W. H. NICHOLLS, Ph.D., Iowa State College, and JOHN A. VIEG, Ph.D.
Formerly Associate Professor of Government, Iowa State College.

109 pages. Tables. \$1.50 (1943)

MACHLUP

International Trade and the National Income Multiplier

An important contribution to international economics, business cycle theory, and monetary theory in general. This book presents a penetrating analysis of the interrelationships of international trade, capital movements, investments and national income. The exposition is crystal clear and patent. The income multiplier becomes a simple and almost obvious tool of analysis by virtue of Dr. Machlup's able treatment.

By FRITZ MACHLUP, Ph.D., University of Buffalo

237 Pages. \$3.50 (1943)

THE BLAKISTON COMPANY
Philadelphia 5, Pa.
